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**Validating Future Force Performance Measures  
(Army Class): Reclassification Test and Criterion  
Development**

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**September 2009**

**Personnel Assessment Research Unit**

**U.S. Army Research Institute  
for the Behavioral and Social Sciences**

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# **VALIDATING FUTURE FORCE PERFORMANCE MEASURES (ARMY CLASS): RECLASSIFICATION TEST AND CRITERION DEVELOPMENT**

## **EXECUTIVE SUMMARY**

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### **Research Requirement:**

To meet the challenges facing the Army, the Army needs predictor measures that will enhance entry-level Soldier selection and classification. One of the purposes of the Army Research Institute for Behavioral and Social Sciences' (ARI's) Army Class project is to provide the Army with recommendations on which predictor measures, in particular measures of non-cognitive attributes (e.g., interests, values, and temperament), demonstrate the greatest potential to inform entry-level Soldier selection and classification decisions. The present report documents the development of criterion measures to assist in these analyses.

A second purpose of the Army Class project is to develop and pilot job knowledge tests (JKTs) that can be used to aid reclassification decisions. If Soldiers are shown to possess critical knowledge, skills, and attributes (KSAs) for their new jobs, this could reduce training requirements and increase force readiness. This report documents the development of reclassification JKTs.

### **Procedure:**

JKTs and performance rating scales were developed for a number of military occupational specialties (MOS). Some of the JKTs were developed for the classification effort and some for the reclassification effort. Rating scales were developed only for the classification effort. After content validity judgments were collected, the result was an item bank of 1,869 items. Resources used included:

- Army subject matter experts (SMEs)
- ARI staff
- Human Resources Research Organization (HumRRO) management, testing, measurement, review, and support staff
- Army doctrine and manuals

### **Findings:**

MOS reclassification tests for skill levels (SLs) 1 through 3 were developed for Infantryman (11B), Cavalry Scout (19D), Military Police (31B), Wheeled Vehicle Mechanic (63B), and Motor Transport Operator (88M). SL1, training, and in-unit classification tests and rating scales were developed for Infantryman (11B), Armor Crewman (19K), Signal Support System Specialist (25U [SL1 only]), Military Police (31B), Wheeled Vehicle Mechanic (63B), Healthcare Specialist (68W), and Motor Transport Operator (88M).

**Utilization and Dissemination of Findings:**

The reclassification JKTs may be pilot tested for use as originally intended, or they may be used to accomplish other Army objectives, including providing information to further populate a job analysis database. The criterion measures will be used in the longitudinal validation efforts.



# **VALIDATING FUTURE FORCE PERFORMANCE MEASURES (ARMY CLASS): RECLASSIFICATION TEST AND CRITERION DEVELOPMENT**

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# **VALIDATING FUTURE FORCE PERFORMANCE MEASURES (ARMY CLASS): RECLASSIFICATION TEST AND CRITERION DEVELOPMENT**

## **CHAPTER 1: INTRODUCTION**

The Personnel Assessment Research Unit (PARU) of the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) is responsible for conducting manpower and personnel research for the Army. The focus of PARU's research is maximizing the potential of the individual Soldier through maximally effective selection, classification, and retention strategies, with an emphasis on the changing needs of the Army as it transforms into the future force.

To meet global force demands, the Army is in a 10- to 12-year transformation to an organizational, manning, training and operational model called Army Force Generation (ARFORGEN). Under this concept, units are organized in modular expeditionary forces, tailored for mission requirements<sup>1</sup>. The centerpiece of the ARFORGEN organizational restructuring are 42 Brigade Combat Teams, which will operate on a 2- to 6-year life cycle program. The modular Brigade Combat Teams are an evolution of the cold-war brigade organizational structure and, as such, require personnel with a different mix of knowledges, skills, and attributes (KSAs) than has historically been required. Some enlisted military occupational specialties (MOS) are in high demand, others are being de-emphasized, and still others are being redefined. The reorganization also places an emphasis on force stabilization (life cycle). Active Army Brigade Combat Teams will operate on a 2-year cycle with a specified schedule for *Reset*, *Train*, and *Deploy*. Currently, Reserve Component Brigade Combat Teams operate on an ad hoc manning system that differs for each unit.

Besides the Brigade Combat Teams, similar modular structures are being applied to the Army's support brigades: aviation, fires (artillery), sustainment (logistics, medical, maintenance, and transportation), battlefield surveillance, and maneuver enhancement (chemical, engineer, and military police). This total force reorganization, combined with force stabilization inherent in the life cycle model, places a greater emphasis on having the right Soldier in the right job.

This current research project is a continuation of separate but related efforts that ARI has been pursuing since 2000 to ensure the Army is provided with the best personnel to meet the emerging demands of the 21<sup>st</sup> century. As such, this current effort builds on over 8 years of research, development, experience, and analysis from those projects. There are three primary prior research efforts designed to improve the Army personnel system that directly feed into this project. These are *Maximizing Noncommissioned Officer (NCO) Performance for the 21<sup>st</sup> Century* (NCO21; Knapp, McCloy, & Heffner, 2004); *New Predictors for Selecting and Assigning Future Force Soldiers* (Select21; Knapp, Sager, & Tremble, 2005); and *Performance Measures for 21<sup>st</sup> Century Soldier Assessment* (PerformM21; Knapp & Campbell, 2006). The

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<sup>1</sup> Details of this transformation continue to evolve. The information provided here was drawn from The Army Campaign Plan (2004, [http://www.army.mil/thewayahead/acppresentations/4\\_1.html](http://www.army.mil/thewayahead/acppresentations/4_1.html)), current as of when this research was initiated, and The Army Posture Statement (2008, <http://www.army.mil/aps/08/>) which provided some updates to the earlier plan..

NCO21 research was designed to identify and validate non-cognitive predictors of NCO performance for use in the NCO promotion system. The Select21 research was designed to provide new personnel tests to improve the capability to select and assign first-term Soldiers with the highest potential for future jobs. The Select21 effort validated new and adapted performance predictors against criteria representing both “can do” and “will do” aspects of performance. The emphasis of the PerformM21 research project was to examine the feasibility of instituting competency assessment for NCOs. As such, the researchers focused on developing cost-effective job knowledge assessments and examining the role of assessment within the overall structure of Army operational, education, and personnel systems. Because of their unique but complementary emphases, these three research efforts provided a strong theoretical and empirical foundation (including potential predictors and criteria) for the current project of examining enlisted personnel selection and classification.

The goal of the present research effort (known as “Army Class”) is to further improve the foundation for Army personnel selection and classification. Personnel selection – the accession of the recruit into the Army – is guided by elaborate personnel policies. Personnel classification – the assignment of new recruits or incumbent Soldiers into a particular MOS – is impacted by many individual and organizational contingencies. The focus of this research is on the individual, but with a firm understanding of operational requirements. Building on the foregoing research, it is designed to investigate issues related to both the selection and classification of new Soldiers and the reclassification of experienced Soldiers.

### **Purpose and Outline of the Report**

This report documents the development of reclassification tests and criterion measures required for the Army Class research project. This Introduction is followed by chapters and appendices that provide detailed descriptions of instrument development for the specific MOS that were targeted in the research. The report concludes with a summary and review of next steps. Specific developmental products such as MOS test blueprints and performance rating scales are contained in the appendices.

### **Selection and MOS Classification**

Entry-level Soldiers should be placed in jobs that best emphasize their KSAs, interests, and potential. Selection and MOS classification takes place during the recruitment phase, when most recruits have no understanding of the Army and often only a superficial understanding of the MOS choices. Moreover, most recruits are young (18-21 years of age), with limited work or specialized experience and performance record. Once classified, Soldiers generally cannot change MOS during their initial enlistment term. Therefore, it is critical for Soldiers to be effectively classified into their initial MOS to maximize performance, job satisfaction, and retention.

Many factors determine how this initial placement decision is made, including the number of Soldiers required in specific Army MOS, the availability of training slots, composite scores on the Armed Services Vocational Aptitude Battery (ASVAB), and recruits’ preferences, skills, and interests. Although little can be done to alter Army characteristics (e.g., needs and training availability), better assessment of recruits’ existing KSAs may lead to

enhanced classification within the constricted space. More comprehensive assessment of new recruits may improve classification into Army positions and result in valued outcomes (e.g., improved performance, increased satisfaction, and increased retention). Hence, the Army has an interest in conducting research to develop and validate assessment tools to assist with recruit selection and job classification.

We developed an array of criterion measures to evaluate the selection and classification potential of the Army Class predictor measures. The criterion measures include job knowledge tests, job performance rating scales (both MOS-specific and Army-wide), and the Army Life Questionnaire (ALQ)—an attitudinal measure derived from the Select21 Army Life Survey (ALS) (Knapp et al., 2005). The Army Class plan for improving the selection and classification process includes two validation approaches: a concurrent validation and longitudinal validation. The concurrent validation involved administering the predictor and criterion measures simultaneously to Soldiers who had been in service for 9 to 36 months. The concurrent validation data collection ended December 2006 and the results are summarized by Ingerick, Diaz, and Putka, (2009).

The Army Class longitudinal validation plan is designed as a four-phase effort. First, the predictors were administered to Soldiers during their initial in-processing at an Army Reception Battalion. In the second phase, training criterion measures were administered to those same Soldiers upon completion of their initial entry training (IET)—either one-station unit training (OSUT) or advanced individual training (AIT). The training phase began in the fall of 2007 and continued through the summer of 2008. In the third phase we are administering in-unit job performance criterion measures, targeting again the same Soldiers at about 18-20 months time in service (TIS). The fourth phase will replicate the third phase, but target the Soldiers at approximately 40 months TIS. The actual testing window for the fourth phase will be when Soldiers have somewhere between 30 and 50 months TIS.

### **MOS Reclassification**

The Army is going through a period of organizational and mission changes while simultaneously meeting operational commitments characterized primarily by the deployments in Iraq and Afghanistan. The current reclassification procedure requires that Soldiers attend extensive training in their new MOS. However, many Soldiers have had experience, often during deployments, in their new MOS. In other situations, Soldiers work in MOS that are somewhat related to their new MOS, or they have civilian experience that is closely related. One way to streamline the reclassification process is to certify KSAs that Soldiers already possess, thereby reducing training requirements and increasing force readiness. This strategy would further minimize the time reclassifying Soldiers spend away from their units and their families. The Army Class research question is whether testing of MOS job knowledge can play a role in increasing the efficiency of the reclassification process. We thus developed prototype tests that could potentially be used for this purpose.

## CHAPTER 2: ELABORATION OF INSTRUMENT DEVELOPMENT REQUIREMENTS

To support the Army Class research requirements, we developed job knowledge tests (JKTs), job performance rating scales, and an attitudinal measure – the Army Life Questionnaire (ALQ), which were used as criterion measures. We included both MOS-specific and Army-wide content in the concurrent and longitudinal validation criterion measures.

### MOS Selection

There are approximately 150 entry-level Army jobs (MOS) into which Soldiers initially may be classified. While the reclassification field is potentially similar, in actuality, reclassification is generally limited to a relatively few hard-to-fill MOS. When considering which MOS to target for this project, we considered MOS densities, job characteristics and differences, anticipated support, and prior research activities to include previous JKT development work. For the reclassification focus, we also considered projected MOS shortages and reclassification trends. While we primarily selected MOS samples separately for both the classification and reclassification efforts, commonality in some MOS criteria allowed for selection overlap in several cases, thus maximizing validation efforts. A total of nine MOS were targeted for inclusion in the Army Class research plan, although two MOS had only a limited role. Seven MOS were used to investigate selection and classification issues, and five were used to address reclassification issues, with some overlap between the two. The MOS and their roles are shown in Table 2.1

**Table 2.1. Army Class Target MOS and Their Roles in the Research**

MOS <sup>a</sup>	Reclassification JKTs	Selection and Classification Validation Stage					
		Concurrent Validation		Longitudinal Validation Training		Longitudinal Validation In-unit	
		PRS	JKT	PRS	JKT	PRS	JKT
11B Infantryman	✓	✓	✓	✓	✓	✓	✓
19D Cavalry Scout	✓						
19K Armor Crewman		✓	✓	✓	✓	✓	✓
25U Signal Support System Specialist		✓	✓				
31B Military Police	✓			✓	✓	✓	✓
63B Wheeled Vehicle Mechanic	✓	✓	✓	✓	✓	✓	✓
68W Health Care Specialist		✓	✓	✓	✓	✓	✓
88M Motor Transport Operator	✓			✓	✓	✓	✓
Army-wide		✓		✓		✓	✓

*Note.* JKT = Job Knowledge Test; PRS= Performance Rating Scales

<sup>a</sup> A reclassification test blueprint was developed for the 38B (Civil Affairs Specialist) but the MOS was subsequently dropped and no job knowledge test development was completed.

In addition to our targeted MOS, we collected predictor data for the selection and classification effort from mixed MOS groups of new Soldiers at reception battalions. Indeed, most of the Soldiers we tested were from MOS other than the targeted MOS. This was the largest group of Soldiers accessed, approaching 6,000 of the approximately 11,000 total tested. We refer to these Soldiers as the “Army-wide” sample.



## **Reclassification Job Knowledge Tests**

Reclassification tests are intended to allow Soldiers who are changing MOS to demonstrate possible requisite job knowledge pertinent to their new MOS, thus presumably eliminating some training requirements. To demonstrate the potential effectiveness of assessment for reclassification, MOS reclassification tests for skill levels (SLs) 1 through 3 were developed for Infantryman (11B), Cavalry Scout (19D), Military Police (31B), Wheeled Vehicle Mechanic (63B), and Motor Transport Operator (88M)<sup>2</sup>. The presumption is that there are skills and knowledges applicable to the new MOS that may have been acquired through (a) MOS commonality; (b) previous job exposure to the new MOS; or (c) civilian education, training, or job experience.

Reclassification is most common early in a Soldier's career, generally occurring before a Soldier reaches SL4 (pay grade E-7), which is why tests were developed to cover SL1, SL2, and SL3 for each of the target MOS. Tasks in an MOS are cumulative through higher skill levels, meaning that lower skill level tasks are included in the higher skill levels as Soldiers progress through subsequent skill levels. Although overlap in content (and test items) occurred, we treated each skill level independently based on the presumption that a Soldier, regardless of skill level, would only take a single test.

Each reclassification MOS JKT comprises several performance categories or sub-areas. For example, the Military Police (31B) test has performance categories that include Weapons, Urban Operations, and Combat Techniques. We anticipate that reclassification tests would be used to determine adequacy of knowledge and skills in such categories, so it was necessary to develop tests such that reliable subtest scores on each job performance category could be obtained. To do this effectively, each reclassification JKT required about 25 to 35 scorable points<sup>3</sup> per job category. Since each skill level test has approximately 4 to 9 categories, the overall test requirement is about 250 scorable points, which translates to a large number of items. Although no specific test administration time parameters were established for reclassification JKTs, a test of this scope should be administrable in 4 hours or less.

We developed a bank of questions suitable for reclassification JKTs. However, the planned pilot tests required to create usable test forms, have been postponed indefinitely.

## **Criterion Job Knowledge Tests**

Table 2.1 summarizes the validation stage for which the individual MOS JKTs have been (or will be) employed. The longitudinal validation predictor data collections began mid-2007 and continued through early 2008. The training criterion data collections began in late 2007 and continued through September 2008. The first round of in-unit criterion data collections began in early 2009 and will conclude in summer 2009. A second round of in-unit data collections is planned to start in mid 2010.

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<sup>2</sup> We initially included Civil Affairs Specialist (38B) in the reclassification work, but the MOS was subsequently dropped and no test development was completed.

<sup>3</sup> We use the term "scorable points" in preference to the more common term "items" because of the incorporation of non-traditional test items, which are often worth more than one point.

The selection and classification criterion tests yield total scores only (as opposed to subscores for specific content areas). The estimated test window for the criterion tests is roughly 40 minutes, which means the tests can have between 50 and 75 scorable points.

We developed the concurrent validation criterion tests first, and at least some JKT items for many of these MOS tests were derived from the Select21 (Knapp et al., 2005) and PerformM21 (Knapp & Campbell, 2006) projects. These projects produced tests in varying states of completeness and applicability to the current requirement. The extant tests for the 11B, 19K, and 25U MOS were fairly complete and required only a final review and consolidation to fit the one-hour test time window. The 63B and 68W MOS tests, also derived from PerformM21, required additional item writing and review to meet the current requirement.

The longitudinal validation criterion tests (both training and in-unit) derived primarily from the skill level 1 reclassification test items for 11B, 31B, 63B, and 88M. The 19K training test was created from the PerformM21 work, and the 68W test included PerformM21 content that was supplemented with new items. An Army-wide JKT is included in the in-unit data collections, and it was created from Army-wide items used in PerformM21 and Select21.

Chapter 3 describes the general process used to develop both the reclassification and criterion tests. Specific details pertaining to individual MOS are provided in Appendixes A through G.

### **Criterion Job Performance Rating Scales**

Job performance ratings provided by supervisors and peers (when feasible) are another criterion measure used to enhance and strengthen the validation process by helping to provide a more comprehensive picture of performance. Table 2.1 shows the breakdown of the job performance rating scales developed for the classification portion of the Army Class project. The training scales target training performance and the in-unit scales focus on Soldiers' job performance after having been in-service for 18 to 20 months. A second round of in-unit data collection is planned, which will target Soldier performance at approximately 40 months time in service.

For the Army Class concurrent validation data collections, we created job performance rating scales for 11B, 19K, 25U, 63B, and 68W. The scales were designed to be used by supervisors and peers. We had MOS-specific rating scales from Select21 for 11B, 19K, and 25U, which we used without change. For the remaining MOS (63B and 68W), we used rating scales from Project A (Campbell & Knapp, 2001) as a starting point. We adapted these scales to the Select21 rating scale format, and then made minor updates based on our knowledge of these MOS. Finally, we worked with 63B and 68W supervisors to finalize these rating scales. In addition to the MOS-specific rating dimensions, we added three Army-wide rating dimensions to each scale to represent major areas from the Select21 performance constructs.

The longitudinal validation included two distinct rating scale requirements. The first was the training requirement. The challenge here was to produce performance scales that represented the training environment and could be administered to drill sergeants/instructors and peers. In all

MOS, we started with existing job scales but adapted them to the AIT/OSUT performance requirements and training situation.

The second requirement involved the use of job performance rating scales during the in-unit data collections. This situation is more typical of rating scales that we have developed previously. Again, however, we built off of a procedure that we have used in the past for development and adaptation of rating scales. We adapted, as necessary, the concurrent validation and training scales. Chapter 4 provides details related to development of both the Army-wide and MOS-specific rating scales. The scales themselves appear in Appendixes H through K.

### **Criterion Army Life Questionnaire (ALQ)**

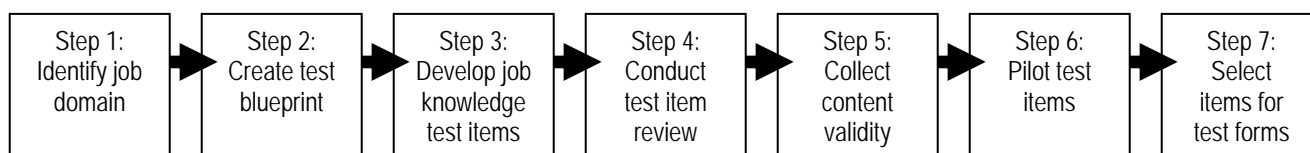
The ALQ is an enhancement of the Army Life Survey (ALS) developed for Select21 (Knapp et al., 2005). It was originally designed to measure Soldiers' experiences in the Army (e.g., training, fit with Army/MOS). The ALQ was used in the Army Class concurrent validation, the training data collections, and the in-unit data collections. Details regarding the development of the ALQ are in Chapter 5.

### CHAPTER 3: JOB KNOWLEDGE TEST DEVELOPMENT PROCESS

The various objectives of the Army Class project include addressing selection, classification, and reclassification issues, sampling numerous MOS, assessing different skill levels within each MOS, and collecting two types of criterion-related validation evidence (concurrent and longitudinal). As a result, over 1,800 job knowledge test items were developed to address all of these requirements.

The concurrent validation JKTs were discussed in the *Introduction* and documented by Ingerick et al. (2009). This chapter focuses on the reclassification objective and the JKT development work for the longitudinal validation (training and in-unit) effort, which targets improvement of the current classification system. Appendixes A through G provide detailed descriptions for each MOS.

Figure 3.1 graphically depicts the process typically followed to create job knowledge tests. The reclassification, training, and in-unit efforts each require different tests. While we followed this process for each test, there was overlap among the steps.



**Figure 3.1. Job knowledge test development process.**

#### Developing the Job Knowledge Items

The training, in-unit, and reclassification efforts all required tests of job knowledge. To fulfill these requirements we developed a pool of job knowledge test items for each MOS that could be used or adapted for any of the tests. The JKTs developed for the reclassification effort and the in-unit piece of the longitudinal validation effort target the assessment of job knowledge of Soldiers with some experience in their Army jobs. These products were modified slightly to support the training performance emphasis of the training tests.

##### *Step 1. Identify the Job Domain*

The initial step in creating a job-based assessment is to identify the job domain – the tasks and KSAs important to the performance of the job. For Army jobs, the job domain is generally defined by tasks that are further broken down into skill levels. For the reclassification work, we were interested in SLs 1-3. Performance requirements are cumulative as Soldiers advance through skill levels. SL1 targets MOS task requirements for pay grades E-1 to E-4. It contains the preponderance of tasks that make up the MOS. SL2 identifies positions requiring performance of tasks directly related to pay grade E-5 involving duty position requirements for

Sergeant in the MOS. SL3 identifies requirements directly related to the MOS duty positions for Staff Sergeant.

Even with innovative test item formats, selected response tests such as those developed in this research primarily assess the knowledge required to perform tasks rather than actual task performance. Hence, we refer to these as “job knowledge tests” even though the test specifications are expressed in terms of performance requirements. Although it would have been possible to develop knowledge content taxonomies (and associated test blueprints), it was much more straightforward to use the task/performance requirement foundation traditionally used by Army training manuals as a basis for defining the job domain requirements.

We defined the job domains using Army doctrine as described in documents including, Soldier Training Publications (STPs), technical manuals (TMs), field manuals (FMs), and in input from Army subject matter experts (SMEs). ARI provided HumRRO analysts access to on-line Army resources. Our staff also has an extensive library of electronic and hard copy documentation from previous projects. In addition, we garnered many updated job documents from site visits with Army SMEs.

The STPs were particularly helpful because they tend to be organized by subject areas and constituent tasks. For example, one SL1 subject area from the 88M STP is *Motor Vehicle Operations*. Under this subject area are a number of tasks, including *Perform Coupling Operations* and *Back Vehicle with Semitrailer*. However, subject areas and tasks are not standardized across MOS or even within MOS and skill level in terms of the number, specificity, or level of detail of subject areas. Therefore, we standardized the domain descriptions by combining related subject areas into Performance Categories. Likewise, we reduced the STP tasks to Performance Requirements. We did this for each MOS, creating a taxonomy of Performance Categories into which the Performance Requirements for each skill level were sorted. In so doing, we followed a set of internal guidelines to make the resulting test blueprint most useful. Foremost was the guideline that each Performance Category be unique and contain homogenous content. Other rules were to:

- Keep the number of Performance Categories limited to facilitate reviews. Although the number of Performance Categories increases with skill level, the goal was to keep the number limited to no more than 12.
- Keep the number of Performance Requirements within a Performance Category to a number that SMEs could rank order. Here the outside limit used was 15 and the minimum goal was 6.
- As much as possible, avoid grossly unequal numbers of Performance Requirements among Categories (i.e., some very large and some very small). Every effort was made to avoid imbalanced Categories.

As an example, the taxonomy for MOS 88M SL3 is shown in Figure 3.2. There are six lettered Performance Categories for this position. Within Performance Category A (Motor Vehicle Operations and Maintenance) there are 14 Performance Requirements. The parenthetical designation of this Category as “(SL1/2)” indicates that although this is a SL3 listing, all the Performance Requirements come from either SL1 or SL2. It should also be noted that

Performance Requirements only approximate STP tasks. The STP must follow strict TRADOC guidelines in what is designated a “task.” Were we to have adhered to the STP task listing, the taxonomy would have been much longer and exceedingly cumbersome for SMEs providing input.<sup>4</sup> The resulting taxonomies were reviewed by Army MOS SMEs for currency, adequacy, and completeness. The prototype taxonomies were revised based on their input.

MOS 88M (Motor Transport Operator) - Skill Level 3
<p><u>Performance Categories</u></p> <ul style="list-style-type: none"> <li>A. Motor Vehicle Operations and Maintenance (SL1/2)</li> <li>B. Transport Cargo and Personnel (SL1/2)</li> <li>C. Tactical Transport Operations (SL1/2)</li> <li>D. Heavy Equipment Transporter (HET) Operations (SL2/3)</li> <li>E. Convoy Operations (SL3)</li> <li>F. Squad/Section Leader Duties (SL3)</li> </ul>
<p><u>Performance Requirements - Motor Vehicle Operations and Maintenance (SL1/2)</u></p> <ul style="list-style-type: none"> <li>1. Perform coupling operations. (SL1)</li> <li>2. Operate vehicle in convoy. (SL1)</li> <li>3. Operate vehicle with standard/automatic/semiautomatic transmission. (SL1)</li> <li>4. Back vehicle with semitrailer. (SL1)</li> <li>5. Perform as wheel vehicle ground guide (day/night). (SL1)</li> <li>6. Operate palletized load system. (SL1)</li> <li>7. Operate the movement tracking system (MTS). (SL1)</li> <li>8. Operate the driver’s vision enhancer (DVE). (SL1)</li> <li>9. Perform preventive maintenance checks and services (PMCS). (SL1)</li> <li>10. Complete accident forms. (SL1)</li> <li>11. Prepare vehicle for inclement weather operation. (SL2)</li> <li>12. Perform coupling operation with a pintle-connected trailer. (SL2)</li> <li>13. Remove and replace a tire on a wheeled vehicle/trailer. (SL2)</li> <li>14. Perform dispatcher duties. (SL2)</li> </ul>

**Figure 3.2. Sample job taxonomy.**

Training tests focused on training performance as opposed to job performance. Even so, there was a great deal of overlap between the training job domains and the SL1 job domains identified for the reclassification and in-unit JKTs. When working with the SMEs, we started with the SL1 taxonomies, and asked them to focus on training requirements. Some Performance Requirements were dropped from consideration. For example, in the 88M MOS, Soldiers are not trained on *Container Roll-in/Roll-out Platform (CROP) Loading and Unloading Operations* during AIT. This requirement is taught in their assigned unit. Therefore, this Performance Requirement was dropped from the 88M training test.

<sup>4</sup> TRADOC, the proponent for Army job analysis and performance definitions, has precise requirements on how tasks can be described, including verbs which can be used, and the restriction of a task statement to a single activity. To reduce the workload on SME reviewers and to better serve project requirements and design, we combined many related tasks surrounding a piece of equipment or a job activity into a single statement. To avoid conflict or confusion with TRADOC requirements, we sought to avoid the use of the term “task.”

### ***Step 2. Create a Test Blueprint***

The second step was to create a test blueprint or test specification. A test blueprint organizes performance information into topic areas and specifies the number of test items (or scorable points) that should be developed for each topic area and the test as a whole. To create the test blueprints we asked SMEs to provide weights for the Performance Categories and ranks for the Performance Requirements from the revised taxonomies created in the previous step.

For the training tests, we took the SL1 blueprints and reviewed them with SMEs to make them more appropriate for a training environment. For the in-unit data collection, we again reviewed the SL1 blueprints with SMEs to ensure they were up-to-date (e.g., not referring to old equipment) and still relevant for Soldiers at approximately 18-20 months time in service. In preparation for the second round of in-unit data collection we will review the in-unit blueprints once more with SMEs to confirm they are appropriate for our purposes.

### ***Step 3. Develop Job Knowledge Test Items***

All items were adapted or developed by HumRRO item writers using a variety of doctrinal and supporting publications available through the Reimer Digital Library (RDL) and other official on-line sources as the basis for item construction. Item writers received training in formalized procedures for standardizing item development. The training included formatting specifications and best practices for developing non-traditional items (e.g., matching, multiple response). The goal was consistency across all MOS and skill levels. Item writers drafted or adapted test items following the blueprint specifications. For several MOS tests, developers had access to previously developed items from Project A (Campbell & Knapp, 2001), Select21 (Knapp et al., 2005), and PerformM21 (Knapp & Campbell, 2006). Many items were updated and adapted for this effort. Items were grouped by Performance Categories and, within Performance Categories; emphasis was on those Performance Requirements receiving the highest rankings from the SME workshop. Items included both “conventional” multiple-choice and non-traditional. We also incorporated graphics, diagrams, and photographs in some items to increase the realism and interpretability.

All items were entered into a database that allows the development and banking of test items and the creation of tests. To help manage the item development process, we acquired a software program to track the status of each test item. This software keeps track of items by MOS, skill level, Performance Category, Performance Requirement, and review status. It also stores content validity ratings (see Step 5) and important notes.

### ***Step 4. Conduct Review of Test Items***

Item review was an integral, iterative step in item development involving three different groups. First, every item was subjected to several rounds and levels of internal review.

Second, every item went through several rounds of SME reviews. Item review workshops were conducted at each MOS proponent school. The SMEs were instructed to consider the following information as they reviewed each item:

- Is the item current? Will the item be relevant for the next 2-3 years?
- Is the item based on trivial or obscure knowledge?
- Are the language, abbreviations, and terminology understandable for the skill level?
- Is the keyed answer(s) correct?
- Are the incorrect answers incorrect? Are they plausible?

The SMEs wrote comments on the hard copy of the item sheets they had been given. Group discussions also were conducted to get additional information or overall impressions about the items that had been reviewed. Finally, after the SME item review workshop feedback had been incorporated, ARI reviewed all items as a final quality control check and final edits were made.

During some of the item review workshops, SMEs identified item content that represented activities they maintained Soldiers did not perform. When pressed, they generally admitted that the questioned content was still taught in formal training (OSUT/AIT; Basic Non-commissioned Officer Course; [BNCOC]) and was doctrinally supported but was not performed during current deployment operations, primarily in Iraq and Afghanistan. Oftentimes, substitute performance requirements were identified. This presented a conundrum on whether to use those items. Ultimately, decisions were made on a case-by-case basis, but generally we avoided changing content without doctrinal support, even though we had anecdotal evidence of deployment-specific practices. To do otherwise would impact the long term utility of the test items.

For the training test, we selected SL1 items that would be appropriate and relevant for training requirements. The SMEs were asked to review each item for applicability to a training environment. They had three choices: (a) accept the item as is, (b) edit the item to make it appropriate for an end-of-training test, or (c) drop the item from consideration for an end-of-training test. We edited some items as directed by the SMEs.

### ***Step 5. Collect Content Validity Ratings***

Content validity is the extent to which a test measures the content domain of interest (Nunnally & Bernstein, 1994). Establishing content validity is a continuous process that starts with the identification of the job domain. Once the test items were drafted, it was essential to confirm content validity as Army jobs are constantly evolving as mission requirements, technology, and doctrine change. A check of content validity was particularly critical since the test items were developed by project staff rather than SMEs. Content validity ratings for each item were collected during the SME item review workshop (see Step 4.). SMEs provided ratings on a 4-point scale for two different criteria (Importance and Consequences; see Figure 3.3). They also provided verbal and written comments for the relevancy issues.

We sought to obtain a minimum of three SME content validity ratings on each item (and on almost all items, we obtained substantially more). We adopted a standard of automatically dropping any item that had a combined mean rating of 1.50 or less to the questions in Figure 3.3. We also closely reviewed any item that had a combined mean rating falling between 1.51 and 2.00 and made decisions to drop, retain, or revise based on all pertinent information about the item.



<p>Importance</p> <p>For Soldiers in this MOS and Skill Level, how important is the knowledge that is needed to answer this item?</p> <p>1 = Not important 2 = Minimally important 3 = Moderately important 4 = Very important</p> <p>Consequences</p> <p>For Soldiers in this MOS and Skill Level, how bad would the consequences be if a Soldier lacked the knowledge that is needed to answer this item?</p> <p>1 = No bad consequences 2 = Minimally bad consequences 3 = Moderately bad consequences 4 = Seriously bad consequences</p>
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**Figure 3.3. Content validity rating scales.**

### ***Step 6. Pilot Test Items***

Before final test forms are created, items must be pilot tested. Pilot testing provides valuable information on internal consistency estimates, difficulty levels, and item discrimination. The item statistics from the pilot are used to make item scoring decisions and facilitate the creation of test forms.

The normal procedure is to go into pilot testing with many more items than will be needed for operational testing. Based on the available testing time, a maximum of 40 minutes, the target number of points for the training and in-unit JKTs was 50-75. The target number of points for the reclassification tests was 200-300 for each of the three skill levels in an MOS.

The original job knowledge test development plan included a pilot of all of the reclassification items. These pilot results were to be used to select the best items for the in-unit JKT and final reclassification tests. Since this pilot data collection was not conducted, ideally we would administer over-length JKTs to allow for some items to be dropped. However, as noted we had a time limit of approximately 40 minutes. We used performance information from the training data collections to help select items for the in-unit tests, but two factors limited the usefulness of that data. First, the target audiences are different for the training and in-unit tests. Just because an item functioned well for a training test does not mean it is appropriate for an in-unit test. Second, the training tests did not include all SL1 items. In preparation for the second round of in-unit testing, we will review the in-unit items and their statistics with SMEs to ensure the items are still viable.

### ***Step 7. Create Final Test Forms***

For the training data collection, we selected items based on item statistics from previous research, where available, and input from SMEs. Then, based on the results of the training data analyses, we dropped some items from scoring. For the in-unit data collection we followed the same process. We used the results of the training data collection as well as SME input to select items. We will use item statistics from the initial in-unit data collection to help “firm up” our JKTs for the second round of in-unit data collection.

### **Test Administration**

The training JKTs were computerized, self-paced assessments. The test administrator began each testing session with a short project briefing and review of the Army’s Privacy Act Statement. Soldiers were led, lock-step, through a series of background questions (e.g., Name, SSN, MOS) and were then asked to complete the JKT at their own pace. Each JKT began with an explanation of how to navigate among the test items and an outline of the content of the test, by Performance Category (e.g., Weapons, Tank driver functions). After completing the JKT, Soldiers were automatically branched to the ALQ, which they also completed at their own pace.

The in-unit tests are administered primarily via the web using survey delivery software and follow a similar format to the training JKTs. We are using computerized versions of the test administered on laptops in a few locations. We are sending staff to locations with large numbers of Soldiers, but many Soldiers are taking the tests on their own. This places a premium on time limits because we expect that without proctors, Soldiers are less likely to complete a test perceived as too long.

### **Products of the JKT Development Work**

As a result of this large undertaking, the Army (including MOS proponents) has prototype blueprints and test items that can be adapted and piloted for any number of purposes. Although we had to postpone our original plan to conduct pilot tests, we will have performance data for some of the items as a result of the criterion-related validation.

## CHAPTER 4: RATING SCALE DEVELOPMENT PROCESS

In addition to the job knowledge tests described in Chapter 3, performance rating scales were developed as criteria for the longitudinal validation. Overall, 20 job performance rating scales are required for the Army Class project; six of these were for the concurrent validation, seven of these are for the training portion, and seven are for the in-unit portion (see Table 2.1). The training scales were completed by both peers and Supervisors, whereas the in-unit scales are being completed only by supervisors.

### The Army-Wide Rating Scales

Army-wide scales were developed for the concurrent validation, training, and in-unit data collections. The development of the concurrent validation scales is documented in Ingerick et al. (2009). Below we review the development of the training and in-unit Army-wide rating scales. The final training Army-wide rating scales are in Appendix H, and the final in-unit Army-wide rating scales are in Appendix I.

#### *Defining Training Army-Wide Rating Scale Dimensions*

To identify the Army-wide dimensions, HumRRO researchers began by reviewing three sources of information: (a) the initial entry training (IET) critical incident dimensions from Select21 – collected as a part of the Predictor Situational Judgment Test development (Knapp et al., 2005), (b) training rating dimensions from Project A (Campbell & Knapp, 2001), and (c) Basic Combat Training (BCT) rating scales developed by ARI (Hoffman, Muraca, Heffner, Hendricks, & Hunter, 2009).

The first step was to review the behavioral statements anchoring and defining the Select21 and ARI dimensions, as well as the training scale reliability estimates and factor analysis results from Project A. We also conducted a sorting task. A synopsis of the sort is shown in Table 4.1. The resulting seven dimensions were:

- Effort
- Physical Fitness and Bearing
- Personal Discipline
- Commitment and Adjustment to the Army
- Support for Peers
- Peer Leadership
- Technical Knowledge and Skill

Five of the seven dimensions were strongly supported across the different sets of scales. The two weaker dimensions were *Commitment and Adjustment to the Army* and *Peer Leadership*. Subsequently we decided to divide *Technical Knowledge and Skill* into two dimensions to differentiate common and MOS-specific technical requirements.

**Table 4.1. Results of Army-wide Rating Scale Dimension Sorting Exercise**

Proposed Army Class Training Dimension	Proposed Army Class Training Question	Project A Training Dimension	Select 21 BCT/OSUT/AIT Dimension	ARI BCT Dimension	Notes
1 <i>Technical Knowledge and Skill</i>	How effectively has this Soldier acquired job/Soldiering knowledge and skill?	Technical Knowledge and Skill	None	Common Task Knowledge and Skill; Basic Rifle Marksmanship Knowledge and Skill	The Project A rating scale asked how effective "is each Soldier in <i>acquiring</i> job/soldiering knowledge and skill?"
2 <i>Effort</i>	How effectively does this Soldier display effort?	Effort	Motivation, Effort, and Initiative; Self-Management	Level of Effort and Initiative on the Job	Loaded with technical knowledge and skill in Project A.
3 <i>Physical Fitness and Bearing</i>	How effectively does this Soldier maintain physical fitness and military appearance?	Physical Fitness; Military Appearance	Physical Fitness and Endurance	Acting as a Role Model	Physical fitness was the most reliably rated Project A training scale. Physical Fitness and military bearing loaded together in Project A factor analysis.
4 <i>Personal Discipline</i>	How effectively does this Soldier maintain self-control and discipline?	Self-Control; Following Regulations and Orders	Delinquency; Self-Control; Respect for Authority and Orders	Demonstrated Integrity, Discipline, and Adherence to Army Procedures	Self-control and Following Regulations loaded together in Project A factor analysis.
5 <i>Commitment and Adjustment to the Army</i>	How effectively does this Soldier adapt to new ways?	None	Adaptability	Adaptability	Dimension is weak. Anchors have to do with adapting to Army (i.e., adjustment).
6 <i>Support for Peers</i>	How effectively does this Soldier support peers?	None	Teamwork; Support for Peers	Relating to and Supporting Peers; Selfless Service Orientation; Cultural Tolerance	
7 <i>Peer Leadership</i>	When given the opportunity, how effectively does this Soldier lead peers?	Leadership Potential	Peer Leadership		Was its own factor in the final 4-factor training model for Project A.
			Safety Consciousness		Make sure that MOS-Specific scales cover this. It is important in training.
				Oral Communication Skill	Do not include. Anchors are high level.
				Problem Solving/ Decision Making Skill	Do not include. Anchors are high level.

The two new dimension titles were as follows:

- Common Task/Warrior Tasks Knowledge and Skill
- MOS Qualification Knowledge and Skill

We then developed dimension definitions for each of the eight final dimensions based on their content, as listed in Figure 4.1.

<p style="text-align: center;">A. Effort</p> <p>Puts forth individual initiative in study, practice, preparation, and participation activities to complete AIT/OSUT requirements and to meet individual Soldier expectations.</p>
<p style="text-align: center;">B. Physical Fitness and Bearing</p> <p>Participates in activities to maintain Army APFT event standards; maintains habits and hygiene conducive to health and to avoiding illness and injury; maintains self, uniforms, living areas, and barracks to Soldier standards.</p>
<p style="text-align: center;">C. Personal Discipline</p> <p>Behaves in a manner that is consistent with Army Core Values; demonstrates respect in word and actions towards superiors, instructors, and others; adheres to Phase IV and Phase V limitations<sup>5</sup>.</p>
<p style="text-align: center;">D. Commitment and Adjustment to the Army</p> <p>Exhibits professional Soldier development; demonstrates acceptable progress towards the completion of the solderization process.</p>
<p style="text-align: center;">E. Support for Peers</p> <p>Respects, assists, cooperates, and teams with fellow Soldiers regardless of gender, race, ethnicity, ability, or background differences; supports other Soldiers when they are in a leadership position.</p>
<p style="text-align: center;">F. Peer Leadership</p> <p>When assigned to AIT/OSUT leadership position, demonstrates resourcefulness, authority, and responsibility commensurate with the situation, position, and their ability.</p>
<p style="text-align: center;">G. Common Task/Warrior Tasks Knowledge and Skill</p> <p>Acquires and demonstrates Common Task Test requirements and proficiency in Warrior Task/Drill training.</p>
<p style="text-align: center;">H. MOS Qualification Knowledge and Skill</p> <p>Acquires and demonstrates AIT/OSUT knowledge and skills required for MOS qualification.</p>

**Figure 4.1. Army-wide training rating dimension definitions.**

For each of the dimensions, we reviewed the existing behavioral anchors and statements and identified the main themes in each dimension. For example, the *Effort* dimension appeared to have three main themes: (a) studying/practicing, (b) handling adversity, and (c) paying attention. Using the existing material, we wrote a high, moderate, and low behavioral statement for each dimension. Thus, we wrote nine behavioral statements for the *Effort* dimension, three for each theme. Our goal was to keep the behavioral statements short and easy to read while maintaining as much richness in definition as possible. For several of the themes we had difficulty creating moderate and high anchors that were truly different from each other. After several internal discussions, we determined that the difficulty in differentiating moderate and high anchors

<sup>5</sup> Initial entry training consists of five phases, and with each passing phase, Soldiers have more personal freedom. Phases IV and V are the last two phases meaning that the limitations on Soldiers are more relaxed.

probably occurred because Soldiers in IET do not have much opportunity to demonstrate behaviors involving high levels of difficulty. So, we decided not to include moderate anchors at all, and we modified the high anchors to be less extreme.

After we finished reviewing and editing the behavioral statements, we asked five members of the Army Test Program Advisory Team (ATPAT)<sup>6</sup> to (a) sort each statement into one of the eight dimensions and (b) rate the level of effectiveness that the statement represents.

Generally there was very good agreement among ATPAT members on dimension assignments. Thirty-one of 42 behavioral statements in the exercise were assigned to the same dimension by 100% of the raters. Five received 80% agreement, and had 60% agreement. Only one high end statement had very low agreement – 40%. We kept it in its original category because ATPAT members did not place it in any other category consistently, and they placed its counterpart low-end statement in the intended category. In one case, the members agreed 100% with each other, but placed the low and high counterpart statements in a category different from what we had intended. We moved the pair of statements to the category indicated by ATPAT members. In all other cases where there was 100% agreement among the members, they also agreed with HumRRO raters. With regard to the effectiveness ratings, there was generally good differentiation between the low and high counterpart statements. A few of the statements we intended to be "low" were rated in the 3.5 to 4.0 range (on a scale of 1 to 7, where 4 is the mid-point). After assessing the likely reasons for the higher than expected ratings, we modified the statements to represent less effective behavior.

Subsequently, a group of infantry (11B) OSUT instructors participated in the rating exercise. As a group, they provided one consensus-based rating. The consensus judgments of 11B instructors concurred with the ATPAT ratings. We made wording and dimensional changes based on this feedback.

### ***Development of the Training Army-Wide Rating Scale Format***

Historically, research comparing rating formats has concluded that no one rating format produces more reliable, valid, or accurate ratings than the others (Bernardin, 1977; DeCotiis, 1977; Landy & Farr, 1980; Schwab, Heneman, & DeCotiis, 1975; Zedeck, Kafry, & Jacobs, 1976). However, recent research suggests that rating scales anchored with job behaviors generally yield better results (Pulakos, 2007). Moreover, the fact that there is little difference in the results of drastically different rating formats suggests that minor tweaks within one kind of format will also not significantly affect the quality of the ratings.

In light of the insignificant effects of format, Pulakos (2007) suggested that (a) the ease with which raters are able to understand and use the format and (b) rater acceptance of the rating format, and (c) preference for using behavioral anchors should play an important role in format selection. With that in mind, HumRRO staff explored several optional behavioral anchor formats for the Army-wide scales that we thought would be more readable and usable than formats we

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<sup>6</sup> This is a group of senior NCOs originally established to provide guidance and support to the PerformM21 project research team and is continuing in this role for the Army Class project. ATPAT membership has evolved, but generally has representatives from each MOS targeted in the research, G-1, Training and Doctrine Command (TRADOC), Forces Command (FORSCOM), and each of the components (Regular and Reserve).

have used in the past. We reviewed graphic rating scales, behavior observation scales, behaviorally-anchored rating scales (BARS), behavioral checklists, and mixed standards rating scales.

After several internal discussions, we chose a format that asks raters to make ratings on each behavioral theme within a dimension (see Figure 4.2). For each theme, a pair of high and low statements is presented. Raters are instructed to mark the circle that most closely represents the ratee's behavior. We selected this format because it forces raters to read the behavioral anchors and, therefore, should increase rating accuracy. This format placed a lot of emphasis on the behavioral anchors. Our team was confident recommending this format because the behavioral anchors were derived from previous work and scaled by the ATPAT and 11B review participants.

During the development process of the training Army-wide scales, we did not believe that we would be able to get sufficient feedback from NCOs on the MOS-specific rating scales in time to make comparable MOS-specific versions. Therefore, we decided that the Army-wide and MOS-specific rating scales would have different formats. Here, we thought that different formats might actually reduce rater boredom with the process. The rating scales were reviewed internally and by ARI. Final wording changes were made based on these reviews.

<b>A. Effort</b>						
Puts forth individual initiative in study, practice, preparation, and participation activities to complete AIT/OSUT requirements and to meet individual Soldier expectations.						
1	Tends to give up on tasks if problems arise.					Persists with tasks, even when problems arise.
	Soldier 1	(1)	(2)	(3)	(4)	(5)
	Soldier 2	(1)	(2)	(3)	(4)	(5)
	Soldier 3	(1)	(2)	(3)	(4)	(5)
	Soldier 4	(1)	(2)	(3)	(4)	(5)
	Soldier 5	(1)	(2)	(3)	(4)	(5)
2	May tune out while an instructor is speaking.					Pays attention in class and studies hard.
	Soldier 1	(1)	(2)	(3)	(4)	(5)
	Soldier 2	(1)	(2)	(3)	(4)	(5)
	Soldier 3	(1)	(2)	(3)	(4)	(5)
	Soldier 4	(1)	(2)	(3)	(4)	(5)
	Soldier 5	(1)	(2)	(3)	(4)	(5)
3	Puts off studying and practicing tasks.					Completes study and practice assignments including non-class requirements on time.
	Soldier 1	(1)	(2)	(3)	(4)	(5)
	Soldier 2	(1)	(2)	(3)	(4)	(5)
	Soldier 3	(1)	(2)	(3)	(4)	(5)
	Soldier 4	(1)	(2)	(3)	(4)	(5)
	Soldier 5	(1)	(2)	(3)	(4)	(5)

**Figure 4.2. Final Army-wide training criterion rating scale format.**

### *Defining the Army-Wide In-Unit Rating Scale Dimensions*

With regard to Army-wide in-unit performance, we considered using the three broad rating dimensions used in the Army Class concurrent validation, and the Army Class training and Select21 dimensions. Ultimately we decided upon starting with the Select21 scales and making revisions as necessary (see Figure 4.3). Table 4.2 presents a mapping of scale dimensions across the three projects – Army Class training, Army Class concurrent validation, and Select21.

**Table 4.2. Mapping of Scales across Three Studies**

Dimension/Scale	Project		
	AC Training	AC CV	Select21 CV
Effort	✓	✓ <sup>a</sup>	✓
Physical Fitness And Bearing	✓	✓	✓
Personal Discipline	✓	✓ <sup>a</sup>	✓
Commitment And Adjustment To Army	✓		✓
Support For Peers	✓	✓	✓
Peer Leadership	✓		✓
Common Task/Warrior Task Knowledge And Skill	✓		✓
MOS Qualification Knowledge And Skill	✓		✓

*Note.* AC = Army Class; CV=concurrent validation;

<sup>a</sup>One scale in the Army Class CV study (Effort and Discipline) overlaps with multiple AC training composite scales.

Our first step was to review Select21 data (Knapp et al., 2005) to determine how the scales might need improvement. Five scales yielded poor reliabilities when rated by supervisors:

- Supports Peers
- Exhibits Cultural Tolerance
- Demonstrates Professionalism and Personal Discipline on the Job
- Demonstrates Personal and Professional Development
- Communication Performance

Estimated reliabilities for *Supports Peers* and *Exhibits Tolerance* were also poor when ratings were made by peers.

We conducted an in-house retranslation task to further assess the quality of the behavioral statements and scale dimensions. We calculated the percentage of agreement with the original Select21 categorization and the percent agreement with each other for each behavioral statement. We also rated the level of effectiveness the behavior represented on a 1-7 scale. We computed means and standard deviations of the effectiveness ratings. There were no significant issues concerning the effectiveness ratings.

The categorizations suggested that there was overlap among several dimensions. For example, the category *Demonstrates Professionalism and Personal Discipline on the Job* contained two statements referring to team goals:

- Willingly puts in required effort to ensure team goals are achieved.
- Does not put in effort to meet team goals, even when given encouragement.



Our raters tended to put those two statements in *Support Peers* or *Exhibits Effort and Initiative on the Job*. Similarly, *Supports Peers* contained the statement “Neglects own assigned tasks, creating more work for others” which our raters tended to put in *Exhibits Effort and Initiative on the Job* or *Demonstrates Personal and Professional Development*.

- 
- A. Common Task Performance – The extent to which the Soldier performs most Common Tasks (e.g., navigation, first aid, weaponry, maintenance) competently and safely and uses computer applications.
- B. MOS-Specific Task Performance – The extent to which the Soldier performs work assignments and displays job-specific knowledge and skill.
- C. Communication Performance – The extent to which the Soldier speaks clearly and concisely and conveys the intended message verbally and in writing.
- D. Information Management Performance – The extent to which the Soldier monitors, interprets, organizes, and redistributes information in digital, printed, or oral format.
- E. Problem Solving and Decision Making Performance – The extent to which the Soldier reacts to new problem situations, applies rules or strategies correctly, and weighs alternatives when making decisions.
- F. Adaptation to Changes in Mission/Locations, Assignments, and Situations – The extent to which the Soldier does not allow stress to affect job performance in high-pressure situations; stays committed to the job when faced with changes in the environment, tasks, responsibilities, or personnel; and commits to learning new things required by technology, mission, or situation.
- G. Exhibits Effort and Initiative on the Job – The extent to which the Soldier puts effort into completing work, seeks out and/or accepts responsibility and additional challenging assignments, and persists in carrying out difficult assignments and responsibilities.
- H. Demonstrates Professionalism and Personal Discipline on the Job – The extent to which the Soldier exhibits selfless service orientation, exhibits integrity and discipline on the job, and follows instructions, rules, and regulations.
- I. Supports Peers – The extent to which the Soldier treats peers courteously and respectfully, provides help and assistance to others, and demonstrates teamwork.
- J. Exhibits Cultural Tolerance – The extent to which the Soldier demonstrates tolerance and respect of other cultural and social backgrounds and is willing to work and communicate with those from different backgrounds.
- K. Demonstrates Personal and Professional Development – The extent to which the Soldier manages their own responsibilities, including work assignments, personal finances, Family, and personal well being, and takes responsibility for attaining necessary training/education.
- L. Demonstrates Physical Fitness – The extent to which the Soldier meets Army standards for physical fitness, strength and weight, and displays military bearing.
- M. Overall Effectiveness
- 

**Figure 4.3. Select21 rating dimension definitions.**

- 
- A. Performing Core Warrior Tasks –Performs most Core Warrior Tasks (e.g., navigation, first aid, weaponry, maintenance) competently and safely.
- B. Performing MOS-Specific Tasks – Performs MOS-specific work assignments; keeps informed of MOS and assignment changes.
- C. Communicating with Others –Speaks clearly and concisely; conveys the intended message verbally and in writing.
- D. Processing Information –Monitors, interprets, and organizes information.
- E. Solving Problems – Adapts to new problem situations; applies prior training, rules, and strategies correctly; weighs alternatives when making decisions; develops novel solutions to problems; completes tasks despite major changes.
- F. Exhibiting Effort – Completes work in a timely manner; puts extra effort into completing work; seeks challenging assignments; persists in carrying out difficult assignments and responsibilities even under adverse and stressful conditions.
- G. Exhibiting Personal Discipline – Exhibits selfless service orientation; exhibits integrity and discipline both on and off the battlefield; follows instructions, rules, and regulations.
- H. Contributing to the Team – Treats team members courteously and respectfully; provides help and assistance to others; contributes to achieving team goals.
- I. Exhibiting Fitness and Bearing – Meets Army standards for physical fitness, strength, and weight; displays military bearing; meets Army standards for AR 670-1.
- J. Interactions with Indigenous People and Soldiers from other Countries – Demonstrates tolerance and respect of other cultural and social backgrounds; willing to work and communicate with those from different backgrounds.
- K. Following Safety Procedures – Follows safety procedures; recognizes and responds to possible dangerous or hazardous situations.
- L. Developing Own Skills - Stays up to date with his or her professional skills by seeking out additional education and training opportunities; commits to learning new things required by technology, mission, or situation.
- M. Managing Personal Matters – Manages personal life, including personal finances, Family, and personal well-being.
- N. Leadership Potential - On this rating scale, evaluate each Soldier on his or her potential effectiveness as an NCO. At this point, you are not to rate on the basis of present performance and effectiveness, but instead indicate how well each Soldier is likely to perform as an NCO. (Note: this item is a global rating on a 1-7 Likert scale).
- 

**Figure 4.4. Army Class Army-wide in-unit rating dimension definitions.**

Previous discussions about rating scales with 11B SMEs suggested that self-management issues (such as making arrangements for bill payment or family matters during deployment) were perhaps underrepresented in the scales. The dimension definition for *Demonstrates Personal and Professional Development* describes management of personal life matters, but all of the anchors are about training and development. We concluded that self-management should be better

distinguished from self-development in the revised dimension set; hence, the creation of *the Managing Personal Matters* and *Developing Own Skills* dimensions (see Figure 4.4).

In the training scales, a *Supports Peers* dimension was not rated very reliably, but a *Peer Leadership* dimension did yield good psychometric qualities. We recalled that *Leadership Potential* scales were useful during Project A. These observations led us to add a *Leadership Potential* dimension to the Army-wide scale set.

We submitted the scales to three SMEs, who expressed no concerns about the scales and to the ATPAT, which made some cosmetic changes to the definitions. ARI reviewers provided important feedback as well. The results are in Figure 4.4. Prior to administering these scales in the second in-unit data collection, we will review the dimensions and relevant initial in-unit statistics with SMEs to ensure the scales are still appropriate.

### ***Development of the Army-Wide In-Unit Rating Scale Format***

We considered three main options for the format of the Army-wide rating scales:

1. Army Class concurrent validation format—Three higher-level rating scales intended to capture the major factors in the Select21 Army-wide Current Observed Rating Scales (COPRS; 7-point scale; below, meets, or exceeds expectations).
2. Select21 Army-wide COPRS format—12 behaviorally anchored rating scales (7-point scale; below, meets, or exceeds expectations).
3. Army Class training format—multiple behavioral statements for each of eight major Army-wide dimensions. In total, there were 21 bipolar behavioral statements organized into the eight dimensions.

Table 4.3 presents single-rater reliability estimates for each of the three projects. (Note that only the “ineffective” anchors from the training form appear in the table.) Although the intraclass correlation coefficient (ICC) estimates overall are fairly low, the most compelling finding is that Soldiers and supervisors seem to have more trouble rating certain items than others within each particular construct. For example, in the *Effort* composite score, the raters seemed to have more trouble rating the studying and practice item, but rated the other two scales more reliably.

Looking at the Army Class concurrent validation and Select21 concurrent validation ICCs compared to training, no approach appeared to have a clear advantage in terms of interrater agreement. There also do not seem to be any major differences in terms of variance and skewness, except that the variance tends to be slightly lower for the training composite scales than the single-item measures in the Select21 and Army Class concurrent validation analyses. In addition to the descriptive statistics, the correlations between the ratings scales and other criteria measures within each of the projects (Army Class training, Army Class concurrent validation, and Select 21) were examined. Again, however, this analysis yielded no notable differences among the scales in the three investigations. Due to these findings and the fact that the modified BARS (Bernardin & Smith, 1981) approach requires fewer resources and time to develop, that is the format we decided upon for the in-unit Army-wide scales. This is the format used previously in the Select21 and Army Class concurrent validation research.

**Table 4.3. Comparison of Single-Rater Reliability Estimates Intraclass Correlation Coefficients (ICCs) across Three Projects**

Training Dimension/Scale	Project		
	AC Training	AC CV	S21 CV
Effort Composite	0.26	0.20	0.19
1 - Tends to give up on tasks if problems arise	0.25		
2 - May tune out while an instructor is speaking	0.23		
3 - Puts off studying and practicing tasks	0.15		
Physical Fitness and Bearing Composite	0.30	0.31	0.35
4 - Tends to exhibit poor grooming and hygiene	0.20		
5 - Lacks sufficient physical endurance to complete physical tasks	0.32		
6 - Tries too avoid exercise/barely meets fitness standards	0.31		
Personal Discipline Composite	0.25	0.20	0.27
7 - Complains about requirements and directions/delays or resists direction	0.22		
8 - Tends to show up late/may forget needed items	0.17		
9 - May sneak contraband items and cover up own behavior	0.19		
10 - May talk back or show disrespect toward superiors	0.18		
11 - Tends to lose temper/gets into confrontations	0.20		
Commitment and Adjustment to Army Composite	0.22		0.18
12 - Difficulty adjusting to Army/may be withdrawn or depressed	0.21		
13 - May get frustrated/have difficulty switching gears if plans change	0.16		
Support for Peers Composite	0.12	0.14	0.15
14 - May not notice that a peer is distressed	0.07		
15 - Is reluctant to help peers/lets peers struggle with tasks	0.14		
16 - Does not work well with peers from diverse backgrounds	0.07		
Peer Leadership Composite	0.24		
17 - Needs assistance of cadre to accomplish leadership assignments	0.20		
18 - Tends to be overly lax or too authoritative toward peers	0.17		
19 - May avoid leader roles or give direction timidly	0.21		
Common Tasks/Warrior Tasks Knowledge and Skill scale	0.18		0.24
MOS Qualification Knowledge and Skill scale	0.16		0.22

*Note.* AC = Army Class; CV = concurrent validation. One scale in the Army Class CV (Effort and Discipline) overlaps with multiple Army Class training composite scales. The text of some statements has been abbreviated.

### The MOS-Specific Rating Scales

MOS-specific performance rating scales were developed for the concurrent validation, training, and in-unit data collections. The development of the concurrent validation scales is documented in Ingerick et al. (2009). Here we review the development of the training and in-unit MOS-specific rating scales. The final training rating scales for all six target MOS are shown in Appendix J. The final in-unit rating scales for all six target MOS are shown in Appendix K.

### ***Defining Training MOS-Specific Rating Scale Dimensions***

The MOS-specific trainee rating scales were all adapted from previous efforts (11B, 19K, 63B, and 68W rating scales from the concurrent validation effort and 31B and 88M from Project A) and modified to reflect training experiences. The first step was to identify dimensions that were suitable for trainees; those thought unsuitable were dropped and others were flagged for review by SMEs. The dimension names were changed to reflect the training environment (e.g., *Learns First Aid* rather than *Performs First Aid*). The same procedure was followed for the behavior examples provided in the scales. For example, a scale referred to a Soldier's behavior in a training exercise rather than performance in an actual situation.

After this internal review, we presented the scales to AIT/OSUT instructors and asked these SMEs the following questions:

- Have we included all relevant scales?
- Have we included scales that are inappropriate for a training environment?
- Have we defined the scales properly?
- Are the behavior examples appropriate?
- Are there any behavior examples that we should add?

The SMEs edited the scales to ensure they reflect the types of behaviors trainees should exhibit in training. After the initial SME review, the developers made further edits to the scales, then conducted a follow-up SME review. Lastly, ARI reviewed the scales and HumRRO finalized them.

While we had initially anticipated collecting ratings only from instructors, we found it also would be feasible to collect peer ratings. This decision led us to review the scales for ease of reading, and we replaced many technical terms or words that might be unfamiliar to young Soldiers with simpler or more common verbiage (e.g., replacing “lax” with “careless”).

### ***Development of the Training MOS-Specific Rating Scale Format***

As discussed previously, the training Army-wide and MOS-specific rating scales were created with different formats. We used a modified version of BARS (Bernardin & Smith, 1981) for the MOS scales. The scales are ordered horizontally and feature behavioral examples for low, moderate, and high performance, but do not include explicitly scaled or calibrated behavior examples. Figure 4.5 shows an example of the *Learns Safety Procedures* scale used in all MOS training rating scales. As can be seen, there are three categories of performance above which is a 7-point scale. Each category provides examples of relevant behavior.

### ***Defining the In-Unit MOS-Specific Rating Scales and Their Format***

We used the concurrent validation scales as a starting point for the 11B, 19K, 63B, and 68W in-unit scales, and adapted the training scales for 31B and 88M. As with the training scales, we relied on SMEs (AIT/OSUT instructors) to help shape the scales and ensure that they targeted Soldiers at approximately 18-20 months time in service. This was an iterative process that was carried out via a series of teleconferences for each MOS. For the most part, the in-unit scales had

quite a bit of overlap with the training scales, except that the standard changed from “Learns to” to “Performs.” And, as expected, some of the dimensions that were dropped for the training scales were added back for the in-unit scales.

E. Learns Safety Procedures						
How well has the Soldier learned to follow safety procedures, being alert to possible dangerous or hazardous situations and taking steps to protect self, other Soldiers, and equipment?						
1	2	3	4	5	6	7
– Is careless in safety awareness; needs special help and reminders.		– Follows safety instructions; adheres to safety warnings, briefings, and instructions.		– Is very alert to safety restrictions and instructions; reminds others of safety requirements.		
– Fails to recognize unsafe conditions or responds improperly.		– Recognizes and responds appropriately to unsafe conditions.		– Recognizes potential vehicle or safety problems that many Soldiers might overlook.		

**Figure 4.5. Sample military occupational specialty rating scale.**

For reasons outlined above, we used the modified BARS format for the in-unit MOS-specific rating scales. One thing to notice is that each MOS training set of scales included a *Learns Safety Procedures* dimension. For the in-unit data collections we included the *Safety* dimension with the Army-wide scales. Only the 63B MOS retains a *Safety* in-unit dimension to specifically deal with that MOS’s special equipment and protective clothing requirements. As before, ARI reviewed and provided feedback on all measures used in the in-unit data collections.

These rating scales will be used in the second in-unit data collection. As with the JKTs and Army-wide scales, we will review the dimensions and relevant statistics from the first round of in-unit data collections with SMEs to ensure they are current for our purposes.

### **Scale Administration and Rater Training**

The training rating scales were computerized, self-paced assessments which could be administered locally or via the Internet. The in-unit scales are being administered primarily via the Internet, hosted on a government server. However, in a few locations we are administering the assessments on laptops.

Rater training is part of the scale administrative process for all data collection efforts. The initial step is to familiarize the raters with the task at hand. We instruct raters to read and understand the dimensions before making ratings and to base their ratings only on behavior they have observed. We present them with the dimensions comprising the scales and provide an example of how to use the scales, including the “N/A” option in cases where appropriate. We provide tips for avoiding common rater errors (e.g., halo) and advise that the ratings will be used for research purposes only.

## CHAPTER 5: THE ARMY LIFE QUESTIONNAIRE DEVELOPMENT PROCESS

The Army Life Questionnaire (ALQ) is an attitudinal measure designed to measure Soldiers' experiences in the Army. The original version was developed for the Select21 project<sup>7</sup> and consisted of 99 items. This chapter describes the development of the training and in-unit versions of the ALQ.

### Development of the Training Measure

The training ALQ was an adaptation of previous versions of the survey from the Army Class concurrent validation and Select21 projects. Training-specific content was developed as well to capture training-related constructs (e.g., *Adjustment to Army Life*). Additional items were adapted from previous measures. For example, one of the *Number of Disciplinary Incidents* items was adapted from the Personnel File Form (PFF) in the Select21 project (Knapp et al., 2005).

The final training ALQ consisted of 13 scales, summarized in Table 5.1. The 13 scales were intended to measure two categories of attitudes and experiences through AIT/OSUT: (a) Soldiers' commitment and retention-related attitudes and (b) Soldiers' performance and adjustment during initial entry training (IET). All of the items were thoroughly checked by a number of key stakeholders, including ARI and HumRRO staff. This included a sensitivity review of the items as well as an SME review to ensure item clarity and appropriateness.

**Table 5.1. Training Army Life Questionnaire (ALQ) Scale Descriptors**

Scale	Description
<i>Commitment and Retention-Related Attitudes</i>	
Attrition Cognitions	Four-item scale measuring the degree to which Soldiers think about attriting before the end of their first term (e.g., "How likely is it that you will complete your current term of service?").
Career Intentions	Five-item scale measuring Soldiers' intentions to re-enlist and to make the Army a career (e.g., "How likely is it that you will re-enlist in the Army?").
Army Fit	Six-item scale measuring Soldiers' perceived fit with the Army in general (e.g., "The Army is a good match for me.").
MOS Fit	Nine-item scale measuring Soldiers' perceived fit with their MOS (e.g., "My MOS provides the right amount of challenge for me.").
Normative Commitment	Five-item scale measuring Soldiers' feelings of obligation toward staying in the Army until the end of their current term of service (e.g., "I would feel guilty if I left the Army before the end of my current term of service.").
Affective Commitment	Seven-item scale measuring Soldiers' emotional attachment to the Army (e.g., "I feel like I am part of the Army 'family.' ").

<sup>7</sup> This measure in the Select21 project was called the Army Life Survey (ALS).

**Table 5.1. (Continued)**


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<i>Initial Entry Training (IET) Performance and Adjustment</i>	
Adjustment to Army Life	Nine-item scale measuring Soldiers' adjustment to life in the Army (e.g., "Looking back, I was not prepared for the challenges of training in the Army.>").
Number of Disciplinary Incidents	Two-item measure (each item is segmented into multiple sub-questions) that asks Soldiers to indicate whether they have had a specific type of disciplinary incident (e.g., "While in the Army, have you ever been formally counseled for lack of effort?").
Last Army Physical Fitness Test (APFT) Score	Single-item asking Soldiers to self-report their most recent APFT score.
Number of IET Achievements	Two-item scale measuring the number of formal achievements a Soldier had during training (e.g., "In AIT or OSUT, were you designated as part of the Fast Track Program?").
Number of IET Failures	Three-item scale measuring the number of repeats, recycles, or failures a Soldier had in training (e.g., "In BCT, OSUT, or AIT, did you ever have to retake the APFT to qualify for record?").
Self-Rated AIT/OSUT Performance	A set of scales asking Soldiers to rate their performance relative to the Soldiers they trained with along four dimensions: Physical Fitness, Discipline, Field Exercises, Classroom and Instructional Modules.
Self-Ranked AIT/OSUT Performance	Single item asking Soldiers to rank order their performance in AIT/OSUT on four dimensions (Physical Fitness, Discipline, Field Exercises, and Classroom and Instructional Modules), from the strongest to the weakest.

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### Development of the In-Unit Measure

To develop the in-unit ALQ, we reviewed the analysis of the concurrent validation and training ALQ data to flag problematic items and determine dimension utility. The first step was to drop scales that were specific to a training environment. For example, *Adjustment to Army Life* items were specific to Soldiers' transition from civilian to Army life. Because Soldiers in their units now had sufficient time to adjust and were no longer in a transition period, these items did not seem relevant. Soldiers' subjective ratings of their own performance were also dropped because the items were training-specific.

The next step was to determine which scales to retain. Table 5.2 shows the scales of the in-unit ALQ. Those marked with an "r" denote the scales retained from the training ALQ. Items in these scales that made reference to something training-specific were modified. Otherwise the scales were the same. Finally, we added dimensions, which in Table 5.2 are those items marked with an "a." The *Army Reenlistment Intentions* scale is new, but utilizes existing items from the training ALQ.



**Table 5.2. In-Unit Army Life Questionnaire (ALQ) Scale Descriptors**

Scale	Description
<i>Deployment</i>	
Deployment History/Tempo <sup>a</sup>	Three-item scale measuring Soldiers' deployment history (e.g., "How many total months have you been deployed?").
Deployment Adjustment <sup>a</sup>	Five-item scale measuring Soldiers' adjustment to deployment schedule (e.g., "I have been able to adjust to life as a deployed Soldier.").
<i>Performance Items</i>	
Disciplinary Action <sup>r</sup>	Seven-item scale measuring disciplinary actions Soldiers have been subjected to (e.g., "Have you ever received an Article 15?").
Performance: Objective <sup>r</sup>	Four-item scale measuring Soldiers' history and accomplishments (e.g., "During your time in the Army, have you received any of the following?").
Last Army Physical Fitness Test (APFT) Score <sup>r</sup>	Single-item asking Soldiers to self-report their most recent APFT score.
Last Weapon Qualification Score <sup>a</sup>	Single-item asking Soldiers to self-report their most recent qualification score.
<i>Attitudinal Measures</i>	
Affective Commitment <sup>r</sup>	Seven-item scale measuring Soldiers' emotional attachment to the Army (e.g., "I feel like I am part of the Army 'family.' ").
Needs-Supplies Army Fit <sup>r</sup>	Six-item scale measuring Soldiers' perceived fit with the Army in general (e.g., "The Army is a good match for me.").
Attrition Cognitions <sup>r</sup>	Four-item scale measuring the degree to which Soldiers think about attriting before the end of their first-term (e.g., "How likely is it that you will complete your current term of service?").
Career Intentions <sup>r</sup>	Three-item scale measuring Soldiers' intentions to re-enlist and to make the Army a career (e.g., "How likely is it that you will make the Army a career?").
MOS Fit <sup>r</sup>	Nine-item scale measuring Soldiers' perceived fit with their MOS (e.g., "My MOS allows me to perform the kind of work I want to do.").
MOS Satisfaction <sup>a</sup>	Six-item scale measuring Soldiers' satisfaction with their MOS (e.g., "How satisfied are you with the amount of variety in your work?").
Reenlistment Intentions <sup>a</sup>	Three-item scale measuring Soldiers' intentions to reenlist in the Army (e.g., "How likely is it that you will leave the Army after completing your current term of service?").

<sup>a</sup> Scales that were added to the ALQ for the in-unit version.

<sup>r</sup> Scales that were retained from the training ALQ.

The *MOS Satisfaction* scale was not part of the training ALQ, but was part of the concurrent validation and the Select21 versions. It was added here because it will have more utility for Soldiers who have been in their units than for Soldiers still in IET. The *Deployment History/Tempo* and *Deployment Adjustment* scales were added so we could determine whether deployments moderate the relationship between predictor measures and key criteria of interest. The deployment items will only be administered to Soldiers who have been deployed. The initial in-unit statistics will be used to modify, if necessary, the measure for the second in-data collection. The in-unit ALQ items are shown in Appendix L.

## **CHAPTER 6: SUMMARY AND NEXT STEPS**

### **Summary**

There are two interrelated but distinct threads to the Army Class project. The first of these centers on entry-level Soldier selection and classification and the second on job reclassification of career Soldiers at some point after their initial duty tour. The Soldier selection and classification requirement involves (a) development and administration of experimental pre-enlistment predictor measures, (b) development of training and in-unit performance criterion measures, and (c) use of these measures in concurrent and longitudinal validation research efforts. The reclassification requirement is more restricted in scope, focusing on the development of job measures that could be used as a tool in assessing Soldiers for purposes of MOS reclassification. This report detailed the development process of the criterion measures for the selection and classification effort and the JKT measures for the reclassification work.

The reclassification effort required conducting a job analysis to determine critical skill and developing corresponding JKTs for Skill Level 1, Skill Level 2, and Skill Level 3 Soldiers in five targeted MOS. JKT items were finalized, to include proponent and SME reviews but, because of changing Army priorities, were not pilot tested.

Soldier selection and classification criterion requirements include the development of job performance measures in the form of JKTs, performance rating scales for supervisors and peers, and an Army Life Questionnaire (ALQ). These measures focus on six demonstration MOS (there was some overlap with the reclassification MOS) plus Army-wide (non-MOS specific) measures.

The HumRRO, Army SME, and ARI reviews resulted in approximately 1,800 JKT items. Table 6.1 summarizes these items. The JKT items were entered into a computer item bank. As noted, conditional circumstances precluded separate pilot testing; however, these items are otherwise ready for use and there is potential for a variety of applications. Some possible applications include the following:

- During or end-of- training assessments to diagnose training problems and successes either as a group or for individual Soldiers.
- Pre-training screens for those who are reclassifying to determine in which area(s) of training the Soldier is proficient, thereby reducing the amount of training time necessary.
- Periodic evaluations to determine where/if follow-up training is required.
- Criterion measures to aid in promotion decisions.
- Criterion measures for future research projects.

Subsets of the SL1 reclassification JKT constitute the bulk of job knowledge measures for the longitudinal criterion-related validation of the Soldier selection and classification portion of the Army Class project. This validation is based on a sample of new Soldiers to whom predictor measures were administered in 2007 at one of four Reception Battalions. Training criterion data collections began in September 2007 and concluded in September 2008. Because of differences between Soldier training experiences and the usual job context, some modifications to the JKTs were necessary for training administrations. The training analyses have been completed and are documented in Knapp and Heffner (2009).

**Table 6.1. Item Bank Summary**

MOS	Skill Level 1	Skill Level 2	Skill Level 3	TOTAL
11B	128	23	71	222
19D	201	173	93	467
19K	86	N/A	N/A	86
31B	82	52	65	199
63B	225	0 <sup>a</sup>	45	270
68W	127	N/A	N/A	127
88M	198	126	73	397
AW	101	N/A	N/A	101
TOTAL	1,148	374	347	1,869

*Note.* N/A means that items were not developed for this Skill Level. 19K and 68W were not part of the Reclassification effort and the Army-wide (AW) items were only intended to focus on Skill Level 1.

<sup>a</sup> 63B has no separate Skill Level 2 tasks so, no distinct Skill Level 2 items were developed.

Although the SL1 MOS JKTs formed the basis for the in-unit job tests for the targeted MOS (11B, 19K, 31B, 63B, 68W, and 88M), because of the passage of time, they were re-verified and, in some cases, updated. Also, as noted, the training tests were modified for use in the training context and were not completely suitable for in-unit application. Developers worked with Army SMEs to review the test blueprints and the proposed bank of test items for currency and relevancy to today's Soldiers and to their jobs at the 18-20 month service point. Additionally, the bulk of the Soldier sample is not from one of the six targeted MOS. Because inclusion of this group is vital to the outcome of the validation, it was necessary to develop an Army-wide test of common content. Although the basis for this test already existed, as with the MOS tests, it was necessary to get SME review and input on the currency and suitability of the blueprint and test items.

Another component of the criterion measures for the in-unit data collections includes MOS and Army-wide rating scales. Again, while the basis for the scales existed in work from previous projects and the concurrent validation, the instruments were reviewed and revised as needed for use as training and in-unit criteria. As with the JKT, developers worked with SMEs to review existing scales to ensure the relevancy of the scale dimensions and the behavioral anchors. The final criterion measure is the ALQ, which was also reviewed and modified as needed for the 2009 in-unit data collection.

The first round of in-unit data collections began in January 2009 and will conclude in fall 2009. The goal is to test the Soldiers when they have between 18 and 20 months time in service. However, in reality the data collection window is closer to 15 to 24 months. A second round of in-unit data collections will be conducted that will access the Soldiers at approximately 40 months service.

### **Next Steps**

A next step is to analyze and document the in-unit data results. Also, to prepare for the second round of in-unit data collections, we will review the in-unit measures with SMEs to verify their utility for measuring Soldier performance at approximately 40 months time in service. This data collection will likely start in early to mid 2010. We will have the same

challenges with this data collection as we have with the current in-unit data collection. That is, the sample will be spread throughout the Army and many of the Soldiers in the sample will be deployed. We will again primarily use Internet-based testing for the data collection. However, for this second round of in-unit data collections, we will be able to apply lessons learned from the first round.

## **Conclusions**

The development of reclassification tests and criterion measures resulted in a bank of approximately 1,800 job-related test items along with training and in-unit job performance rating scales. That interest in the use of reclassification testing waned before their completion in no way diminishes the potential value of these test items. Good test items always have been in demand to support scientific investigations in the Army personnel system and the items developed in the reclassification work have the potential for application outside their initial scope.

While interest in the reclassification application shifted, the Army's focus on the Army Class selection and classification work intensified as the project progressed. Use of the criterion measures developed under this phase of the project have become more critical to adjunct Army programs and the longitudinal validation of Soldier selection and classification predictors is of increasing importance. The work accomplished thus far in the Army Class project provides a solid and usable foundation to support the Army's interests.

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## APPENDIX A

### 11B JOB KNOWLEDGE TEST DEVELOPMENT

The 11B Infantryman MOS is part of the concurrent, training, and in-unit validation, and the reclassification effort. This appendix describes the development of the 11B JKTs.

#### Developing the 11B Job Knowledge Test Blueprints

To identify the job domain for SL1-3, we relied mostly on two 11B Soldier Training Publications (STPs). The first was the STP for SL1 (7-11B1-SM-TG *Soldier's Manual and Trainer's Guide, MOS 11B, Infantry, Skill Level 1*) and the second was the STP for SL2 and SL3 (7-11B24-SM-TG *Soldier's Manual and Trainer's Guide, MOS 11B, Infantry, Skill Levels 2, 3 and 4.*). For each skill level, we organized the Requirements and Categories to facilitate the development of test blueprints. We had 12 11B Basic Non-commissioned Officer Course (BNCOC) students (in pay grades E-6 and E-7) complete a review, weighting, and ranking exercise for each skill level.

The SL1 Categories given the highest weight were *Tactics, Security, Movement, and Navigation*; *Weapons: Bayonets, Sights, Mines, Machine Guns*; and *Weapons: Rifle and Pistol*. The *Weapons: Flame Assault Shoulder Weapon (FLASH)* Category was given a weight of zero by the SMEs, hence no items were developed. Not surprisingly, supervisory and leader-related Categories are given the highest weights in SL2 and SL3. For instance, *Team Leader Operations and Tactics* was the heaviest weighted SL2 Category, and *Supervise/Conduct Security, Sustainment, Vehicle Commander Operations* was the heaviest weighted SL3 Category.

We used the blueprint exercise results to create the test blueprints for the classification and reclassification work. We used the weights to allocate points across the Performance Categories, while the ranks were used to determine the number of points for each Performance Requirement. Tables A.1 – A.3 show the final test blueprint for each skill level<sup>8</sup>.

**Table A.1. 11B Skill Level 1 Blueprint**

Category	%	Performance Requirement	% of Points (w/in Category)
Tactics, Security, Movement, Navigation	21	Move as a member of a fire team.	19
		Perform as a member of a patrol.	14
		Prepare, enter waypoints, and navigate using a precision global positioning receiver.	14
		Conduct combat operations according to the law of war.	10
		Determine direction within the target area.	10
		Challenge persons entering your area.	10
		Locate mines by visual means.	10
		Employ hand grenades during urban operations.	10
		Estimate range.	5

<sup>8</sup> Complete blueprint exercise results for all MOS are available upon request.

*Table A.1. (Continued)*

Category	%	Performance Requirement	% of Points (w/in Category)
Weapons: Bayonets, Sights, Mines, Machineguns	17	Perform function check on squad automatic weapons (SAW).	18
		Operate red dot Aimlight.	18
		Maintain/boresight/zero red dot Aimlight (M68).	18
		Correct malfunctions on MK19 grenade machine gun.	12
		Perform misfire procedure on LAW (AT4).	12
		Maintain/operate straight telescope (M145).	12
		Install/remove antitank mine.	6
		Prepare an antiarmor range card.	6
Weapons: Rifle and Pistol	16	Zero an M16-series rifle.	25
		Mount/dismount/zero aiming light to M16-series rifle.	19
		Engage targets using aiming light on M16-series rifle.	19
		Mount/dismount/zero night vision sight to M16-series rifle.	13
		Mount/dismount/zero thermal weapon sight to M16-series rifle.	13
		Correct malfunctions/perform function check on pistol.	13
Communications	12	Prepare SINGARS (manpack) for operation.	17
		Install, operate and troubleshoot SINGARS single channel (SC) and frequency hopping (FH) as net member or net control station (NCS).	17
		Operate automated net control device (ANCD).	17
		Operate tactical radio sets with security equipment.	17
		Operate secure retransmission (RETRANS) set.	8
		Use numerical cipher/authentication system/encode and decode messages using tactical operations code.	8
		Prepare/submit interference message report.	8
		Recognize electronic attack (EA) and implement electronic protection (EP).	8
Vehicle Weapons	10	Load/unload 25mm ammunition cans (HEI-T, APDS).	20
		Load/unload TOW launcher system.	20
		Perform operator maintenance on coaxial (COAX) machinegun.	20
		Maintain, perform system self-test, perform preoperational inspection of TOW launcher/missile.	10
		Engage targets with a TOW missile system.	10
		Perform immediate action on misfire/remove misfire on a TOW missile system.	10
		Collimate nightsight to TOW launcher system optical sight.	10
Night Vision Devices	10	Operate and maintain night vision goggles.	30
		Operate and maintain night vision devices.	30
		Operate and maintain night vision weapons sights.	20
		Operate and maintain thermal viewer.	20

Five 11B drill instructors reviewed the SL1 blueprint to determine its relevance for a training test. We, therefore, had SMEs focus on the training environment. In the process, Performance Category *Vehicle Weapons* was dropped, and *Weapons: Rifle and Pistol* was given more weight.

To create the in-unit JKT, we again worked with 11B SMEs. Because some time had elapsed between the creation of the SL1 blueprint and the in-unit data collection, we had the

SMEs review the SL1 blueprint to confirm its utility. The *Vehicle Weapons Category* was again dropped because not all 11B Soldiers do these tasks and most of the items from this category did not survive SME review. *Weapons: Rifle and Pistol* and *Weapons: Bayonets, Sights, Mines, Machineguns* were given slightly more weight.

**Table A.2. 11B Skill Level 2 Blueprint**

Category	%	Performance Requirement	% of Points (w/in Category)
Team Leader Operations and Tactics	30	Control movement of a fire team. (SL2)	27
		Select and occupy an overwatch position. (SL2)	17
		Issue an oral operations order. (SL2)	13
		Conduct a breach of a wire obstacle. (SL2)	13
		Enforce operations security. (SL2)	10
		Locate a target by polar plot. (SL2)	10
		J10. Clear misfires. (SL2)	10
Tactics, Security, Movement, Navigation	20	Prepare, enter waypoints, and navigate using a precision global positioning receiver. (SL1)	20
		Move as a member of a fire team. (SL1)	15
		Perform as a member of a patrol. (SL1)	15
		Determine direction within the target area. (SL1)	15
		Estimate range. (SL1)	10
		Conduct combat operations according to the law of war. (SL1)	10
		Locate mines by visual means. (SL1)	10
		Employ hand grenades during urban operations. (SL1)	5
Vehicle Gunnery	15	Boresight/zero vehicle weapons systems (TOW, COAX, 25mm). (SL2)	7
		Engage targets with vehicle weapons systems. (SL2)	7
		Install/remove COAX. (SL2)	7
		Operate/engage targets with the TOW launcher. (SL2)	7
		Engage targets with COAX. (SL2)	7
		Load/unload COAX. (SL2)	7
		Conduct preparation and mounting/dismounting of TOW. (SL2)	7
		Correct malfunctions/perform function check on COAX. (SL2)	7
		Perform immediate action/misfire procedures on TOW. (SL2)	7
		Engage targets with automatic gun. (SL2)	7
		Load/unload automatic gun. (SL2)	7
		Perform misfire procedures on automatic gun. (SL2)	7
		Determine TOW launcher firing limitations. (SL2)	7
		Maintain/perform function check on automatic guns. (SL2)	7
		Select firing positions/placement of mounted/dismounted TOW. (SL2)	7

*Table A.2. (Continued)*

Category	%	Performance Requirement	% of Points (w/in Category)
Communications	14	Prepare SINCGARS (manpack) for operation. (SL1)	14
		Operate automated net control device (ANCD). (SL1)	14
		Install, operate and troubleshoot SINCGARS single channel (SC) and frequency hopping (FH) as net member or net control station (NCS). (SL1)	14
		Maintain and operate C2 receiver/transmitter (AN/PRC 117). (SL2)	14
		Operate tactical radio sets with security equipment. (SL1)	7
		Prepare/submit interference message report. (SL1)	7
		Use numerical cipher/authentication system/encode and decode messages using tactical operations code. (SL1)	7
		Recognize electronic attack (EA) and implement electronic protection (EP). (SL1)	7
		Operate secure retransmission (RETRANS) set. (SL1)	7
		Install, operate, and maintain tactical telephone sets. (SL1)	7
Weapons: Bayonets, Sights, Mines, Machineguns	11	Perform function check on squad automatic weapons (SAW). (SL1)	18
		Maintain/boresight/zero red dot Aimlight (M68). (SL1)	18
		Operate red dot Aimlight. (SL1)	18
		Maintain/operate straight telescope (M145). (SL1)	9
		Correct malfunctions on MK19 grenade machine gun. (SL1)	9
		Prepare an antiarmor range card. (SL1)	9
		Perform misfire procedure on LAW (AT4). (SL1)	9
		Install/remove antitank mine. (SL1)	9
Weapons: Rifle and Pistol	10	Zero an M16-series rifle. (SL1)	20
		Engage targets using aiming light on M16-series rifle. (SL1)	20
		Mount/dismount/zero night vision sight to M16-series rifle. (SL1)	20
		Mount/dismount/zero thermal weapon sight to M16-series rifle. (SL1)	10
		Mount/dismount/zero aiming light to M16-series rifle. (SL1)	10
		Construct field expedient firing aids for M16-series rifle. (SL1)	10
		Correct malfunctions/perform function check on pistol. (SL1)	10

*Note.* Higher SLs subsume tasks from lower levels.

**Table A.3 11B Skill Level 3 Blueprint**

Category	%	Performance Requirement	% of Points (w/in Category)
Supervise: Conduct Security, Sustainment, Vehicle Commander Operations	21	Operate the commander's display/viewer on wheeled/track infantry vehicles. (SL3)	33
		Direct vehicle and equipment recovery operations. (SL3)	29
		Protect classified information and material. (SL3)	24
		Supervise operational decontamination. (SL3)	14
Supervise/Conduct Offensive/Defensive Operations/Missions	20	Conduct maneuver of a squad (dismounted). (SL3)	20
		Conduct maneuver of a section/squad (mounted). (SL3)	20
		Conduct defense by mounted section/squad. (SL3)	15
		Conduct an attack on a building by dismounted/mounted unit. (SL3)	10
		Conduct defense in urban operations, dismounted/mounted. (SL3)	10
		Conduct operation of a patrol base. (SL3)	10
		Conduct point/anti-vehicle/area ambush by dismounted/mounted units. (SL3)	10
		Reorganize a unit. (SL3)	5
Supervise/Conduct Unit Movement	19	Conduct movement techniques of a squad. (SL3)	26
		Conduct a leader's reconnaissance. (SL3)	21
		Conduct reconnaissance and movement of anti-armor section. (SL3)	16
		Direct dismount from an infantry carrier. (SL3)	16
		Direct a driver over a terrain route. (SL3)	16
Tactics, Security, Movement, Navigation	16	Conduct combat operations according to the law of war. (SL1)	19
		Prepare, enter waypoints, and navigate using a precision global positioning receiver. (SL1)	19
		Determine direction within the target area. (SL1)	13
		Estimate range. (SL1)	13
		Perform as a member of a patrol. (SL1)	13
		Destroy supplies and equipment. (SL1)	13
		Move as a member of a fire team. (SL1)	6
		Locate mines by visual means. (SL1)	6
		Employ hand grenades during urban operations. (SL1)	6
Team Leader Operations and Tactics	13	Issue an oral operations order. (SL2)	23
		Select and occupy an overwatch position. (SL2)	15
		Control movement of a fire team. (SL2)	15
		Guide a helicopter to a landing point. (SL2)	15
		Locate a target by polar plot. (SL2)	8
		Conduct a breach of a wire obstacle. (SL2)	8
		Enforce operations security. (SL2)	8

**Table A.3 (Continued)**

Category	%	Performance Requirement	% of Points (w/in Category)
Communications	11	Operate automated net control device (ANCD). (SL1)	18
		Prepare SINCGARS (manpack) for operation. (SL1)	18
		Install, operate and troubleshoot SINCGARS single channel (SC) and frequency hopping (FH) as net member or net control station (NCS). (SL1)	9
		Prepare/submit interference message report. (SL1)	9
		Operate tactical radio sets with security equipment. (SL1)	9
		Maintain and operate C2 receiver/transmitter (AN/PRC 117). (SL2)	9
		Recognize electronic attack (EA) and implement electronic protection (EP). (SL1)	9
		Operate secure retransmission (RETRANS) set. (SL1)	9
		Use numerical cipher/authentication system/encode and decode messages using tactical operations code. (SL1)	9

*Note.* Higher SLs subsume tasks from lower levels.

### Developing the 11B Job Knowledge Test Items

In addition to the STPs, HumRRO item developers had access to several field manuals (FMs) and technical manuals (TMs) to help with item development:

- FM 3-21.71 *Mechanized Infantry Platoon and Squad (Bradley)*
- FM 3-23.25 *Light Anti-Army Weapons*
- FM 3-23.30 *Grenades and Pyrotechnic Signals*
- FM 23-27 *MK 19, 40-mm Grenade Machine Gun, MOD 3*
- FM 24-33 *Communication Techniques: Electronic Countermeasures*
- FM 7-7 *The Mechanized Infantry Platoon and Squad*
- FM 7-8 *The Infantry Rifle Platoon and Squad*
- TM 9-1005-201-10 *Operator's Manual Machine Gun, 5.56-mm, M249 with Equipment*
- TM 9-1240-413-12&P *Operator's and Unit Maintenance Manual Including Repair Parts and Special Tools List for M68 Sight, Reflex with Quick Release and Mount*
- TM 11-5820-890-10-1 *Operator's Manual for SINCGARS Ground Combat*

Once the items had gone through numerous internal reviews, they were reviewed by 11B SMEs. In this workshop, 12 BNCOC instructors and drill sergeants were split into two groups; each group reviewed a different set of items. In addition to reviewing the items, the SMEs also provided content validity ratings. About 10% of the items were dropped due to low content

validity ratings and feedback from SMEs. ARI reviewed and provided feedback on the remaining items.

For the training test, the training SMEs reviewed the SL1 items. Based on their feedback, we edited some items to make them more appropriate for a training test and selected the final item set. For the in-unit test, we worked with SMEs to review and select items that were most appropriate for job performance of a Soldier at approximately 18-20 months time in service. We used as many items as we could from the concurrent and training validation to fulfill this requirement.

## APPENDIX B

### 19D JOB KNOWLEDGE TEST DEVELOPMENT

The 19D Cavalry Scout MOS is part of the reclassification effort only. The JKTs include SL1-3. Below we describe the process taken to create the test items.

#### Developing the 19D Job Knowledge Test Blueprints

We used the 19D STPs for SL1-3 to develop job domains. The STPs included 17-19D1-SM *Soldier's Manual Cavalry Scout MOS 19D Skill Level 1*; 17-19D2-SM *Soldier's Manual Cavalry Scout MOS 19D Skill Level 2*; and 17-19D3-SM-TG *Soldier's Manual and Trainer's Guide Cavalry Scout MOS 19D Skill Level 3*. The job domains were hierarchical organizations of Performance Requirements and Categories, which we used as a basis for test blueprint development exercises (one for each skill level). We had 12 Advanced Non-commissioned Officer Course (ANCOC) students and one ANCOC instructor complete the blueprint development exercises.

Table B.1 contains the blueprint for SL1. The *Weapons* Category was given the most weight for SL1. As with the 11B results, the heaviest weighted Categories in SL2 and SL3 are supervisory in nature. Results for SL2 and SL3 are in Tables B.2 and B.3.

**Table B.1. 19D Skill Level 1 Blueprint**

Category	%	Performance Requirement	% of Points (w/in Category)
Weapons	25	Correct malfunctions, perform function checks on machine guns.	32
		Mount/dismount, zero night vision sights.	16
		Set headspace and timing on caliber .50 machine gun.	20
		Operate/maintain night vision sights, night vision goggles, and thermal viewers.	12
		Mount, dismount thermal sights on weapons.	20
Communications, FBCB2, and Individual Skills	20	Prepare SINCGARS (Manpack) for Operation.	25
		Prepare and operate SINCGARS frequency hopping.	20
		Prepare and operate global positioning system.	20
		Perform before operations checks and startup procedures for FBCB2.	15
		Maintain vehicle intercom system.	15
Tactics and Nuclear, Biological, Chemical Defense	20	Perform movement in urban terrain (mounted/dismounted).	40
		Conduct surveillance from an LP/OP.	30
		Enter a building in urban operations.	30
Scout Vehicles and Driver Skills	20	Perform operator maintenance and maintain reconnaissance vehicle.	25
		Drive/operate crew reconnaissance vehicle.	25
		React to enemy contact while operating reconnaissance vehicle.	15
		Perform emergency evacuation procedures from a reconnaissance vehicle.	15
		Tow/recover a reconnaissance vehicle.	10
		Load/unload and stow ammunition on reconnaissance vehicle.	10



**Table B.1. (Continued)**

Category	%	Performance Requirement	% of Points (w/in Category)
Mines and Demolitions	15	Detect mines, booby traps, IEDs.	47
		Construct demolition firing systems, demolition initiating sets, and prime military explosives.	20
		Locate mines using mine detectors.	13
		Install and remove firing devices.	13
		Neutralize mines, booby traps, IEDs.	7

### Developing the 19D Job Knowledge Test Items

HumRRO item developers had access to items previously developed for Project A (Campbell & Knapp, 2001) as well as the following Army FM's:

- FM 3-06.11 *Combined Arms Operations in Urban Terrain*
- FM 3-20.15 *Tank Platoon*
- FM 3-20.98 *Reconnaissance Platoon*
- FM 7-100 *Opposing Force Doctrinal Framework and Strategy*

All 19D items were reviewed by internal SMEs and presented to 14 ANCOC students and 2 ANCOC instructors. The Army SMEs provided content validity ratings in addition to feedback on the items. A little over 5% of the items were dropped due to low content validity ratings and negative feedback from SMEs. ARI's feedback was received and incorporated.

**Table B.2. 19D Skill Level 2 Blueprint**

Category	%	Performance Requirement	% of Points (w/in Category)
Advanced Tactics, Search Procedures, and Accountability	25	Navigate while mounted; conduct vehicle tactical navigation. (SL2)	28
		Search/clear a building. (SL2)	24
		Direct tactical movement (vehicle, section, platoon). (SL2)	20
		Supervise local security. (SL2)	20
		Inspect personnel and equipment. (SL2)	8
Gunnery and Vehicle Operations	25	Zero, engage targets, and correct malfunctions with vehicle machine guns - .50 cal, 25mm, coax. (SL2)	24
		Maintain reconnaissance vehicle weapon systems. (SL2)	20
		Engage targets with reconnaissance vehicle weapon systems. (SL2)	20
		Control squad/team formations while dismounted. (SL2)	16
		Prepare a range card for the reconnaissance vehicle. (SL2)	12
		Mount, dismount, perform system self-test, perform misfire procedure, engage target with M220. (SL2)	8

**Table B.2. (Continued)**

Category	%	Performance Requirement	% of Points (w/in Category)
Advanced Communications and Reports	15	Employ FBCB2 map, FIPR, status, admin, apps, nav, quick send, and filter functions. (SL2)	27
		Issue an oral operations order. (SL2)	20
		Prepare FBCB2 combat messages, overlays, etc. (SL2)	20
		Perform message management with FBCB2. (SL2)	13
		Perform during and after maintenance and shutdown procedures on FBCB2. (SL2)	13
		Prepare and submit SHELREP, MORTREP, etc. (SL2)	7
Weapons	15	Set headspace and timing on caliber .50 machine gun. (SL1)	27
		Correct malfunctions, perform function checks on machine guns. (SL1)	20
		Prepare and operate the LRAS3, mounted and dismounted. (SL1)	13
		Operate and maintain night vision sights, night vision goggles, and thermal viewers. (SL1)	13
		Mount/dismount thermal sights on weapons. (SL1)	13
		Mount MK19 machine gun on vehicle. (SL2)	13
Communications, FBCB2, and Individual Skills	10	Perform before operations checks and startup procedures for FBCB2. (SL1)	30
		Prepare and operate SINCGARS frequency hopping. (SL1)	20
		Prepare and operate global positioning system. (SL1)	20
		Prepare SINCGARS (manpack) for operation. (SL1)	20
		Assemble adjoining map sheets. (SL1)	10
Advanced Demolitions, NBC, and Platoon Warning Systems	10	Clear misfires and supervise personnel handling ammunition. (SL2)	30
		Supervising positioning of chemical agent alarms. (SL2)	20
		Conduct a demolition guard operation. (SL2)	20
		Prepare, install, and monitor a platoon early warning system. (SL2)	20
		Use and operate radiac meters, dosimeters, and chargers. (SL2)	10

*Note.* Higher SLs subsume tasks from lower levels.

**Table B.3. 19D Skill Level 3 Blueprint**

Category	%	Performance Requirement	% of Points (w/in Category)
Tactics—Conduct Mounted and Dismounted Operations	30	Plan and conduct reconnaissance of a built-up area. (SL3)	27
		Plan and conduct a patrol (mounted and dismounted). (SL3)	20
		Conduct a route, zone, area, bridge, and obstacle (including water obstacle) reconnaissance. (SL3)	20
		Supervise placement of OP/LP. (SL3)	17
		Direct reaction to ambush in urban terrain. (SL3)	10
		Direct search of a building; mark a building. (SL3)	7
Logistics, Maintenance, Range, and Vehicle Operations Supervision	20	Conduct resupply operation at platoon/team level. (SL3)	30
		Direct vehicle and equipment recovery operations. (SL3)	25
		Supervise boresighting and zeroing of reconnaissance vehicle weapon systems. (SL3)	20
		Direct operation of live-fire ranges. (SL3)	10
		Direct engagements from the commander's position of reconnaissance vehicle. (SL3)	10
		Conduct evacuation drills of reconnaissance vehicle. (SL3)	5
Advanced Tactics, Search Procedures, and Accountability	15	Direct tactical movement (vehicle, section, platoon). (SL2)	27
		Navigate while mounted; conduct vehicle tactical navigation. (SL2)	20
		Search/clear a building. (SL2)	20
		Conduct terrain reconnaissance (determine stream velocity, % of slopes, radius of curves, etc). (SL2)	13
		Supervise local security. (SL2)	13
		Search vehicles and conduct personal search/frisk in a combat environment. (SL2)	7
Communications and NBC Supervision	15	Perform a map reconnaissance. (SL3)	40
		Prepare a map overlay, route reconnaissance overlay, section sector sketch. (SL3)	27
		Develop a 5 point contingency plan; conduct troop leading procedures. (SL3)	20
		Prepare and submit SITREP. (SL3)	13
Advanced Communications and Reports	10	Issue an oral operations order. (SL2)	30
		Prepare FBCB2 combat messages, overlays, etc. (SL2)	20
		Employ FBCB2 map, FIPR, status, admin, apps, nav, quick send, and filter functions. (SL2)	20
		Perform message management with FBCB2. (SL2)	20
		Prepare and submit SHELREP, MORTREP, etc. (SL2)	10
Weapons	10	Mount, dismount, zero night vision sights. (SL1)	30
		Prepare and operate LRAS3, mounted and dismounted. (SL1)	20
		Operate and maintain night vision sights, night vision goggles, and thermal viewers. (SL1)	20
		Perform operator maintenance/troubleshoot LRAS3. (SL3)	20
		Boresight the LRAS3 FLIR and day video camera. (SL3)	10

*Note.* Higher SLs subsume tasks from lower levels.

## APPENDIX C

### 19K JOB KNOWLEDGE TEST DEVELOPMENT

The 19K Armor Crewman MOS is part of the concurrent, training, and in-unit validation. A concurrent validation JKT was developed previously (Ingerick et al., 2009). Here we describe the process to create the training and in-unit JKTs.

#### Developing the 19K Job Knowledge Tests

We were able to use data, the test blueprint, and items from the PerformM21 work (Knapp & Campbell, 2006) as our starting point so we did not need to develop new 19K test items. Four AIT instructors and one civilian training specialist helped with the training test development. The SMEs reviewed the blueprint developed in ARI's PerformM21 research effort and made adaptations resulting with the training blueprint shown in Table C.1.

The SMEs reviewed 87 SL1 PerformM21 items across the nine Performance Categories. Based on their feedback, we dropped just under one-third of the items and edited others for a training test. The final test has 61 items and 73 points.

**Table C.1. 19K Training Blueprint**

Category	%	Performance Requirement	% of Points (w/in Category)
Perform Tank Driver Functions and Operations	30%	Drive a tank (all conditions).	41
		Start/stop the tank engine.	23
		Prepare the tank driver's station for operation.	18
		Perform tank driver's before, during, and after-operation checks and services.	18
Operate and Maintain Tank- Mounted Machine Guns	24%	Engage targets with the M240 machine gun from the tank loader's station.	82
		Perform operator maintenance on an M240/M240C machine gun/.50 cal HBTT.	18
Maintain, Load, and Stow Tank Gun Ammunition	14%	Inspect tank ammunition for serviceability and prepare it for stowing.	50
		Stow ammunition in a tank.	50
Perform Tank Maintenance Functions	12%	Main gun maintenance and service.	100
Perform General Tank Crew Operations	8%	Extinguish a fire on a tank.	50
		Use visual signaling techniques.	33
		Evacuate a wounded crewman from a tank.	17
Perform Tank Loader Functions and Operations	7%	Perform tank loader main gun misfire procedures.	60
		Load/unload the tank main gun.	40
Operate in a Net-Centric Environment	6%	Operate SINCGARS single channel (SC) frequency hopping (FH) as a net member or as net control station (NCS).	100

For the in-unit JKT, we used item statistics from the concurrent and training validation data collections to identify potential items for the in-unit test. These items were reviewed by Armor SMEs and their modifications were implemented. The SMEs created a list of performance areas that 19K Soldiers with one year in service should master. This list substantially overlapped

with the training blueprint categories confirming that our existing blueprint was adequate. However, a few changes were implemented. For example, the *Operate in a Net-Centric Environment* Category was dropped because the existing items were dated. Also, the *Perform Tank Maintenance Functions* Category was expanded to include additional Performance Requirements.

The in-unit SMEs originally suggested creating different versions of the test based on the actual equipment a Soldier primarily uses: the M1A1, the M1A2, or the Stryker Mobile Gun System (MGS). We advised that we do not have the resources to support development of three different versions of the 19K test. Instead we selected items that apply to both the M1A1 and M1A2 tanks. We also included an extra 17 M1A1-only test items. Soldiers who are assigned to Stryker units will not be administered 19K items. However, they will complete the ALQ.

## APPENDIX D

### 31B JOB KNOWLEDGE TEST DEVELOPMENT

The 31B Military Police MOS is part of the training and in-unit validation, and the reclassification effort. The JKTs include a training test, a SL1 test for both the in-unit validation and reclassification effort, and SL2 and SL3 tests for the reclassification effort.

#### Developing the 31B Job Knowledge Test Blueprints

In addition to the 31B STPs (19-95B1-SM MOS95B, *Military Police Skill Level 1 Soldier Manual*<sup>9</sup> and 19-95B24-SM-TG MOS95B, *Military Police Skill Levels 2/3/4 Soldier's Manual and Trainer's Guide*), we used the *Military Police (31B) Job Analysis Survey* results (Knapp & Campbell, 2006) to guide our organization of Performance Requirements and Categories.

Twelve BNCOC instructors completed a blueprint development exercise. In contrast to what project staff had proposed, the SMEs preferred Performance Requirements and Categories that match more closely the subject area and task organization in the tables of contents of the 31B STPs. We implemented these changes and gathered weights and ranks of the Performance Categories and Requirements, respectively.

We developed items for just the six highest-weighted Categories for SL1 (six for SL2 and five for SL3) based on two factors. First, we needed to reduce the large number of Categories (14) and Requirements to develop tests that could be administered within the time limits established. Second, the SMEs advised that the first six Categories contained the tasks that 31B Soldiers would spend the bulk of their time performing. The *Weapons* and *Combat Techniques* Categories received the highest weights for SL1, whereas *Combat Techniques* was the heaviest weighted Category for SL2. Table D.1 shows the results for SL1. The results for SL2 are in Table D.2. The SL3 requirement was dropped by ARI to allow for other requirements.

**Table D.1. 31B Skill Level 1 Blueprint**

Category	%	Performance Requirement	% of Points (w/in Category)
Weapons	24	MK19 MG – load, unload, correct malfunctions, engage targets, maintain, perform function check, zero, prepare range card, mount/dismount from vehicle/ tripod.	32
		M2 MG – load, unload, correct malfunctions, engage targets, maintain, perform function check, zero, prepare range card, mount/dismount from vehicle/tripod.	32
		M249 MG – load, unload, zero, perform function check, lay using field expedients.	20
		M9 Pistol – load, unload, correct malfunctions, engage targets, maintain, perform function check.	16
Combat Techniques	24	Move as a member of a fire team.	32
		Locate mines/IEDs/booby traps by visual means.	32
		React to indirect fire while mounted.	20
		Prepare mine detector/locate mines.	16

<sup>9</sup> Effective 1 October 2003 the Military Police MOS designation changed from 95B to 31B.

**Table D.1. (Continued)**

Category	%	Performance Requirement	% of Points (w/in Category)
Urban Operations	14	Perform movement techniques during MOUT.	50
		Select hasty firing positions during MOUT.	29
		Prepare positions for individual and crew-served weapons during MOUT.	21
Area Security	14	Perform as a member of an in-transit security team.	50
		Patrol a restricted area.	29
		Control entry to and exit from a restricted area.	21
Maneuver and Mobility Support Operations (MMSO)	14	Operate a traffic control point (TCP).	36
		Operate a roadblock and a checkpoint.	36
		Control traffic at a defile and holding area.	14
		Operate a dismount point.	14
Detainee Operations	10	Perform EPW/Civilian Internee (CI) security and control activities at an EPW/CI camp.	40
		Process EPW/CI at a collecting point or holding area.	40
		Escort EPW/CI to rear area.	10
		Process EPW/CI for internment.	10

Unlike the NCOs who served as SMEs for the classification and reclassification work, the three SMEs for the training work were civilians with responsibility for training development and delivery. They declined to comment on the SL1 blueprint, so we made no edits and used it for the training test.

**Table D.2. 31B Skill Level 2 Blueprint**

Category	%	Performance Requirement	% Points (w/in Category)
Combat Techniques	25	Move as a member of a fire team. (SL1)	24
		Control movement of a fire team. (SL2)	16
		Control organic fires. (SL2)	16
		Call for and control CAS. (SL2)	12
		Locate mines/IEDs/booby traps by visual means. (SL1)	8
		Locate a target by polar plot/shift from known point. (SL2)	8
		React to indirect fire while mounted. (SL1)	8
		Prepare mine detector/locate mines. (SL1)	4
		Direct a minesweeping party. (SL2)	4
Urban Operations	17	Perform movement techniques during MOUT. (SL1)	35
		Select hasty firing positions during MOUT. (SL1)	35
		Prepare positions for individual and crew-served weapons during MOUT. (SL1)	30
Area Security	17	Perform as a member of an in-transit security team. (SL1)	41
		Patrol a restricted area. (SL1)	35
		Control entry to and exit from a restricted area. (SL1)	24
Maneuver and Mobility Support Operations (MMSO)	17	Operate a traffic control point (TCP). (SL1)	22
		Operate a roadblock and a checkpoint. (SL1)	18
		Supervise establishment and operation of a TCP. (SL2)	18
		Supervise establishment and operation of roadblock/checkpoint. (SL2)	18
		Control traffic at a defile and holding area. (SL1)	6
		Supervise establishment and operation of defile/holding area. (SL2)	6
		Operate a dismount point. (SL1)	6
		Supervise establishment and operation of a dismount point. (SL2)	6

**Table D.2. (Continued)**

Category	%	Performance Requirement	% Points (w/in Category)
Weapons	12	MK19 MG – load, unload, correct malfunctions, engage targets, maintain, perform function check, zero, prepare range card, mount/dismount from vehicle/ tripod. (SL1)	25
		M2 MG – load, unload, correct malfunctions, engage targets, maintain, perform function check, zero, prepare range card, mount/dismount from vehicle/tripod. (SL1)	25
		M203 grenade launcher - load, unload, correct malfunctions, engage targets, maintain, perform function check. (SL2)	17
		M249 MG – load, unload, zero, perform function check, lay using field expedients. (SL1)	17
		M9 Pistol – load, unload, correct malfunctions, engage targets, maintain, perform function check. (SL1)	17
Detainee Operations	12	Perform EPW/Civilian Internee (CI) security and control activities at an EPW/CI camp. (SL1)	42
		Process EPW/CI at a collecting point or holding area. (SL1)	25
		Escort EPW/CI to rear area. (SL1)	17
		Process EPW/CI for internment. (SL1)	17

*Note.* Higher SLs subsume tasks from lower levels.

We secured the assistance of SMEs once again to help create the in-unit test. The SL1 blueprint again served as the starting point. Two Categories increased their weight slightly: *Area Security* and *Combat Techniques*. *MMSO* and *Detainee Operations* decreased their weight slightly.

### **Developing the 31B Job Knowledge Test Items**

Using the STPs and the following Army manuals as source material, HumRRO staff developed test items.

- FM 3-19.1 *Military Police Operations*
- FM 3-19.4 *Military Police Leader's Handbook*
- FM 19-10 *Military Police Law and Order Operations*

Twelve ANCOC students reviewed skill levels 1 and 2 items and provided content validity ratings. Some items required minor edits, but none were dropped at this stage. ARI reviewed and provided feedback on the 31B items.

We had the civilian SMEs review the SL1 items to determine their appropriateness for a training test. They were provided paper copies of all SL1 items and they provided written feedback on each item. A summary of their concerns is noted below:

- Since the SL1 items were developed in fall 2006, new doctrine has been introduced. Because of the new doctrine, many items were outdated.
- They thought there were too many “knowledge only” items and not enough performance-based items. They felt that the tasks learned in OSUT are performance-based, so the test items should follow that concept.



- The non-traditional item formats were not acceptable to them. It was their opinion that these formats do not follow Army test item construction guidelines and are unnecessarily confusing.

Based on their feedback we did a major review of the items. Many were dropped and many were rewritten to reflect doctrinal changes. *Area Security* and *Detainee Operations* were the categories most affected by the new doctrine. Our focus was on the content of the items, rather than the format, meaning that we did not rewrite non-traditional items to be multiple choice items.

To select items for the in-unit test, we first reviewed the training statistics to identify those items with the most potential for use as measures of job performance, rather than training performance. The items identified were submitted to SMEs for review, and based on their input items were selected for inclusion on the in-unit test.

## APPENDIX E

### 63B JOB KNOWLEDGE TEST DEVELOPMENT

The 63B Wheeled Vehicle Mechanic MOS is part of the concurrent, training, and in-unit validation and reclassification effort. The JKTs include a training test, a SL1 test for the concurrent and in-unit validation and reclassification work, and SL2 and SL3 tests for the reclassification work. The development of the concurrent validation test is described in Ingerick et al. (2009).

#### Developing the 63B Job Knowledge Test Blueprints

The job domain was defined using the STP (9-63B13-SM-TG *Soldier's Manual and Trainer's Guide 63B, Wheeled Vehicle Mechanic: Skill Levels 1, 2, and 3*) as a guide. Twelve ANCOC students and one ANCOC instructor provided weights and ranks for the Performance Categories and Requirements, respectively.

The SL1 Category weights were fairly even, with the *Chassis* Category garnering the heaviest weight. In SL2, *General Maintenance* was weighted heaviest, and in SL3, *Shop Management and Operations Supervision* was the heaviest weighted category. See Tables E.1 – E.3 for the blueprints.

The SL1 blueprint was modified for the training requirement with the help of seven 63B AIT instructors. The result was that *Engine*, *Electrical*, and *Chassis* increased slightly in weight while *Power Train* decreased by quite a bit (i.e., 26% to 16%). For the in-unit work, we had a different set of SMEs review the existing SL1 blueprint to determine its appropriateness for use as the basis for the in-unit test. The SMEs weighted *Electrical* and *Power Train* more and *General Maintenance* less.

**Table E.1. 63B Skill Level 1 Blueprint**

Category	% of Test	Performance Requirement	% of Points (within Category)
Engine: Lubrication, fuel, exhaust, and cooling system	18	Troubleshoot and correct malfunctions in fuel system.	17
		Troubleshoot and correct malfunctions of glow plug system.	17
		Service engine assembly.	17
		Correct malfunctions in fuel pump.	11
		Troubleshoot cooling system and replace radiator, hoses, lines and clamps.	11
		Correct malfunctions of fan, fan drive, and drive belts.	6
		Replace fuel lines and fittings, fuel filter assembly, fuel tank.	6
		Troubleshoot exhaust system and replace muffler and crossover pipe.	5
		Correct malfunctions in oil cooler and lines.	5
		Replace engine oil filter.	5

*Table E.1. (Continued)*

Category	% of Test	Performance Requirement	% of Points (within Category)
Electrical: Engine, instrument panel, wiring harness systems	16	Troubleshoot malfunctions of electrical system.	19
		Troubleshoot starter system and replace starter.	19
		Troubleshoot charging system.	13
		Repair engine and chassis wiring harness.	6
		Troubleshoot electrical gauges.	6
		Correct malfunctions of sending units and warning switches.	6
		Correct malfunctions of alternator.	13
		Replace protective control box.	6
		Correct malfunctions of 100 amp alternator.	6
		Correct malfunction of batteries.	6
Power Train: Transmission, transfer, propeller shafts, axles and components	19	Troubleshoot and service transmission.	16
		Adjust geared hub spindle bearing.	11
		Troubleshoot transfer.	11
		Troubleshoot axles.	11
		Replace upper and lower ball joints.	11
		Replace CV boot assembly.	11
		Replace propeller shafts, universal joints, and center bearings.	11
		Replace front axle spindle.	5
		Replace halfshaft.	5
		Correct malfunction of geared hub and knuckle.	4
Chassis: Brakes, wheels and hubs, steering, spring and shocks, body, winch components, central tire inflation system (CTIS)	24	Replace neutral safety switch.	4
		Troubleshoot brake system.	14
		Replace hand brake shoes.	9
		Replace service brake shoes.	9
		Replace master cylinder and hydro-boost.	4
		Troubleshoot steering system.	8
		Replace brake lines and fittings.	8
		Correct malfunctions of wheel and tire assemblies.	8
		Troubleshoot and correct malfunctions on central tire inflation system (CTIS).	4
		Replace front and rear brake pads, calipers, and rotors.	4
		Correct malfunction of drag link assembly.	4
		Replace air compressor and belts; inspect air brake control valves.	4
		Replace air hydraulic cylinder and treadle valve.	4
		Correct malfunction of tie rod assembly.	4
		Correct malfunction of power assist cylinder; replace power steering lines and fittings.	4
		Replace shock absorbers.	4
		Replace seat belts.	4
		Troubleshoot winch.	4
General Maintenance: Test equipment, tool kits, preventive maintenance	23	Perform scheduled preventive maintenance checks and services (PMCS).	48
		Maintain toolkit.	9
		Prepare equipment inspection maintenance worksheet.	17
		Maintain test, measurement, and diagnostic equipment (TMDE).	17
		Maintain assigned vehicle.	9

**Table E.2. 63B Skill Level 2 Blueprint**

Category	% of Test	Performance Requirement	% of Points (w/in Category)
Engine: Lubrication, fuel, exhaust, and cooling system	17	Troubleshoot and correct malfunctions in fuel system. (SL1/2)	18
		Troubleshoot and correct malfunctions of glow plug system. (SL1/2)	18
		Service engine assembly. (SL1/2)	17
		Correct malfunctions in fuel pump. (SL1/2)	11
		Replace fuel lines and fittings, fuel filter assembly, fuel tank. (SL1/2)	6
		Troubleshoot cooling system and replace radiator, hoses, lines and clamps. (SL1/2)	6
		Correct malfunctions of fan, fan drive, and drive belts. (SL1/2)	6
		Correct malfunctions in oil cooler and lines. (SL1/2)	6
		Troubleshoot exhaust system and replace muffler and crossover pipe. (SL1/2)	6
		Replace engine oil filter. (SL1/2)	6
Electrical: Engine, instrument panel, wiring harness systems	18	Troubleshoot malfunctions of electrical system. (SL1/2)	21
		Repair engine and chassis wiring harness. (SL1/2)	6
		Troubleshoot charging system. (SL1/2)	16
		Troubleshoot electrical gauges. (SL1/2)	11
		Troubleshoot starter system and replace starter. (SL1/2)	11
		Correct malfunctions of alternator. (SL1/2)	11
		Correct malfunctions of sending units and warning switches. (SL1/2)	6
		Correct malfunctions of 100 amp alternator. (SL1/2)	6
		Correct malfunction of batteries. (SL1/2)	6
		Replace protective control box. (SL1/2)	6
Power Train: Transmission, transfer, propeller shafts, axles and components	17	Troubleshoot and service transmission. (SL1/2)	18
		Troubleshoot transfer. (SL1/2)	12
		Replace propeller shafts, universal joints, and center bearings. (SL1/2)	12
		Troubleshoot axles. (SL1/2)	11
		Replace front axle spindle. (SL1/2)	6
		Replace upper and lower ball joints. (SL1/2)	11
		Correct malfunction of geared hub and knuckle. (SL1/2)	6
		Adjust geared hub spindle bearing. (SL1/2)	6
		Replace halfshaft. (SL1/2)	6
		Replace CV boot assembly. (SL1/2)	6
		Replace neutral safety switch. (SL1/2)	6

**Table E.2. (Continued)**

Category	% of Test	Performance Requirement	% of Points (w/in Category)
Chassis: Brakes, wheels and hubs, steering, spring and shocks, body, winch components, central tire inflation system (CTIS)	18	Troubleshoot brake system. (SL1/2)	11
		Troubleshoot and correct malfunctions on central tire inflation system (CTIS). (SL1/2)	6
		Replace front and rear brake pads, calipers, and rotors. (SL1/2)	6
		Troubleshoot steering system. (SL1/2)	6
		Replace master cylinder and hydro-boost. (SL1/2)	6
		Replace air hydraulic cylinder and treadle valve. (SL1/2)	6
		Replace air compressor and belts; inspect air brake control valves. (SL1/2)	6
		Replace service brake shoes. (SL1/2)	6
		Replace brake lines and fittings. (SL1/2)	6
		Correct malfunction of power assist cylinder; replace power steering lines and fittings. (SL1/2)	6
		Replace hand brake shoes. (SL1/2)	5
		Correct malfunctions of wheel and tire assemblies. (SL1/2)	5
		Correct malfunction of drag link assembly. (SL1/2)	5
		Correct malfunction of tie rod assembly. (SL1/2)	5
		Replace shock absorbers. (SL1/2)	5
		Troubleshoot winch. (SL1/2)	5
		Replace seat belts. (SL1/2)	5
General Maintenance: Test equipment, tool kits, preventive maintenance	30	Perform scheduled preventive maintenance checks and services (PMCS). (SL1/2)	47
		Maintain test, measurement, and diagnostic equipment (TMDE). (SL1/2)	17
		Prepare equipment inspection maintenance worksheet. (SL1/2)	16
		Maintain assigned vehicle. (SL1/2)	10
		Maintain toolkit. (SL1/2)	10

*Note.* Higher SLs subsume tasks from lower levels.

### Developing the 63B Job Knowledge Test Items

We adapted some Project A (Campbell & Knapp, 2001) and PerformM21 (Knapp & Campbell, 2006) items for this MOS. We also developed items using several Army manuals:

- AR 385-10 *The Army Safety Program*
- DA PAM 738-750 *Functional Users Manual for the Army Maintenance Management System (TAMMS)*
- FM 1-02 *Operational Terms and Graphics*
- FM 5-170 *Engineer Reconnaissance*

- TM 9-2320-280-10 *Operator's Manual for Truck, Utility: Cargo/Troop Carrier, 1-1/4 Ton, 4X4, M998*
- TM 9-2320-365-10 *Operator's Instruction Manual M1078 Series, 2-1/2 Ton, 4X4, Light Medium Tactical Vehicles (LMTV)*
- TM 9-8000 *Principles of Automotive Vehicles*

These items were subjected to several rounds of reviews by internal SMEs and presented to six BNCOC students who provided feedback and content validity ratings. Just under one quarter of items were dropped due to low content validity ratings and negative feedback from SMEs. ARI reviewed and provided feedback on the items.

For the training test, seven AIT instructors reviewed SL1 items and based on their input, training item selection decisions were made. We edited several items to make them relevant for a training test.

We reviewed the training statistics to help identify items that could potentially be used for the in-unit test. SMEs reviewed these items and others, and based on their input, we selected items for the in-unit test.

**Table E.3. 63B Skill Level 3 Blueprint**

Category	% of Test	Performance Requirement	% of Points (w/in Category)
Engine: Lubrication, fuel, exhaust, and cooling system	9	Troubleshoot and correct malfunctions in fuel system. (SL1/2)	12
		Troubleshoot and correct malfunctions of glow plug system. (SL1/2)	10
		Replace fuel lines and fittings, fuel filter assembly, fuel tank. (SL1/2)	10
		Correct malfunctions in fuel pump. (SL1/2)	10
		Troubleshoot cooling system and replace radiator, hoses, lines and clamps. (SL1/2)	10
		Correct malfunctions in oil cooler and lines. (SL1/2)	10
		Troubleshoot exhaust system and replace muffler and crossover pipe. (SL1/2)	10
		Service engine assembly. (SL1/2)	10
		Correct malfunctions of fan, fan drive, and drive belts. (SL1/2)	9
		Replace engine oil filter. (SL1/2)	9
Electrical: Engine, instrument panel, wiring harness systems	8	Troubleshoot malfunctions of electrical system. (SL1/2)	13
		Repair engine and chassis wiring harness. (SL1/2)	13
		Troubleshoot charging system. (SL1/2)	13
		Troubleshoot starter system and replace starter. (SL1/2)	13
		Correct malfunctions of sending units and warning switches. (SL1/2)	13
		Troubleshoot electrical gauges. (SL1/2)	13
		Correct malfunctions of alternator. (SL1/2)	13
		Correct malfunctions of 100 amp alternator. (SL1/2)	12
		Replace protective control box. (SL1/2)	12
		Correct malfunction of batteries. (SL1/2)	12

*Table E.3. (Continued)*

Category	% of Test	Performance Requirement	% of Points (w/in Category)
Power Train: Transmission, transfer, propeller shafts, axles and components	10	Troubleshoot transfer. (SL1/2)	10
		Troubleshoot and service transmission. (SL1/2)	10
		Replace propeller shafts, universal joints, and center bearings. (SL1/2)	10
		Correct malfunction of geared hub and knuckle. (SL1/2)	10
		Adjust geared hub spindle bearing. (SL1/2)	10
		Replace upper and lower ball joints. (SL1/2)	10
		Troubleshoot axles. (SL1/2)	10
		Replace front axle spindle. (SL1/2)	10
		Replace halfshaft. (SL1/2)	10
		Replace CV boot assembly. (SL1/2)	10
		Replace neutral safety switch. (SL1/2)	10
Chassis: Brakes, wheels and hubs, steering, spring and shocks, body, winch components, central tire inflation system (CTIS)	11	Troubleshoot brake system. (SL1/2)	19
		Replace air hydraulic cylinder and treadle valve. (SL1/2)	18
		Troubleshoot steering system. (SL1/2)	18
		Correct malfunction of power assist cylinder; replace power steering lines and fittings. (SL1/2)	9
		Replace front and rear brake pads, calipers, and rotors. (SL1/2)	9
		Replace master cylinder and hydro-boost. (SL1/2)	9
		Correct malfunctions of wheel and tire assemblies. (SL1/2)	9
		Correct malfunction of drag link assembly. (SL1/2)	9
General Maintenance: Test equipment, tool kits, preventive maintenance	15	Maintain test, measurement, and diagnostic equipment (TMDE). (SL1/2)	34
		Perform scheduled preventive maintenance checks and services (PMCS). (SL1/2)	2
		Prepare equipment inspection maintenance worksheet. (SL1/2)	2
		Maintain assigned vehicle. (SL1/2)	13
		Maintain toolkit. (SL1/2)	13
Shop Management and Operations Supervision	30	Manage the unit level logistics system (ULLS). (SL3)	13
		Review Army Material Status System (AMSS) reports. (SL3)	13
		Supervise maintenance operations. (SL3)	10
		Manage shop safety program. (SL3)	10
		Manage tool control procedures. (SL3)	7
		Prepare a standing operating procedure (SOP). (SL3)	7
		Maintain publications library. (SL3)	7
		Establish maintenance facilities. (SL3)	7
		Interpret a maintenance operational overlay. (SL3)	7
		Manage TMDE calibration program. (SL3)	7
		Deploy maintenance/recovery support team. (SL3)	3
		Manage key control procedures. (SL3)	3
		Manage the unit Army oil analysis program (AOAP). (SL3)	3
		Conduct terrain and route reconnaissance. (SL3)	3

*Table E.3. (Continued)*

Category	% of Test	Performance Requirement	% of Points (w/in Category)
Diagnostic and Recovery Management	17	Perform diagnostic procedures of fuel systems. (SL3)	12
		Perform diagnostic procedures of diesel engines. (SL3)	11
		Perform diagnostic procedures of electrical systems. (SL3)	11
		Perform diagnostic procedures of air systems. (SL3)	6
		Perform diagnostic procedures of transmission systems. (SL3)	6
		Perform diagnostic procedures of steering systems. (SL3)	6
		Perform diagnostic procedures of brake systems. (SL3)	6
		Perform diagnostic procedures of cooling systems. (SL3)	6
		Perform diagnostic procedures of hydraulic systems. (SL3)	6
		Perform diagnostic procedures of CTIS. (SL3)	6
		Perform diagnostic procedures of winch systems. (SL3)	6
		Perform battlefield damage assessment and repair (BDAR). (SL3)	6
		Recover a disabled or overturned vehicle. (SL3)	6
		Determine recovery method. (SL3)	6
		Operate oxyacetylene equipment. (SL3)	6
		Perform diagnostic procedures on material handling equipment (MHE). (SL3)	6
		Perform diagnostic procedures on trailers. (SL3)	6

*Note.* Higher SLs subsume tasks from lower levels.



## APPENDIX F

### 68W JOB KNOWLEDGE TEST DEVELOPMENT

The 68W Health Care Specialist MOS is part of the concurrent, training, and in-unit validation. Because this MOS is not part of the reclassification effort, no SL2 or 3 tests are needed. A concurrent validation JKT was developed previously (Ingerick et al., 2009), but that test did not completely cover the 68W MOS performance domain. Unlike the 19K MOS, which also was not part of the reclassification work, the 68W MOS did not have a “ready-to-use” blueprint and database of items from which to start. Therefore, the initial step was to develop a SL1 test blueprint and subsequently, SL1 test items.

#### Developing the 68W Job Knowledge Test Blueprints

To identify the job domain for the SL1 JKT, we reviewed the 68W STP (8-91W15-SM-TG *Soldier’s Manual and Trainer’s Guide 91W, Health Care Specialist: Skill Levels 1, 2, 3, 4, and 5<sup>10</sup>*), focusing on the SL1 Performance Requirements. Six BNCOC instructors completed a blueprint exercise. Although the reaction to the preliminary list was favorable, the SMEs felt that a fifth category, *Contemporary Operating Environment*, should be added to reflect tactical concepts.

The Category weights were fairly even, with *Casualty Management* and *Emergency Medical Treatment* receiving the highest weights. Using the blueprint exercise results, we developed the SL1 test blueprint. Eight AIT instructors reviewed the Performance Requirements for the SL1 categories and we used their feedback to create the training test blueprint. As a result of this process, *Triage and Evacuation* received a lower weight and *Basic Patient Care* received a higher weight. We had another group of SMEs review the SL1 blueprint for use in the in-unit test. The weights for the Performance Categories remain largely the same as in the SL1 blueprint.

#### Developing the 68W Job Knowledge Test Items

HumRRO item developers used the STPs and other sources, such as the following, for item development:

- FM 3-21.38 *Pathfinder Operations*
- FM 6-22.5 *Combat Stress*
- FM 27-10 *The Law of Land Warfare*

All items were reviewed by internal SMEs and reviewed by six BNCOC instructors who provided content validity ratings. A few items were dropped due to low content validity ratings and feedback from SMEs. Additional items were identified as questionable, and are currently in the item bank with a status of “revise or drop.”

The AIT instructors involved with the training test blueprint selected items for a training test. We secured another group of SMEs to review and select items for the in-unit test.

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<sup>10</sup> Effective 1 October 2006 the Health Care Specialist MOS designation changed from 91W to 68W.

**Table F.1. 68W Skill Level 1 Blueprint**

Category	% of Test	Performance Requirement	% of Points (within Category)
Basic Patient Care	17	Measure a patient's vital signs.	18
		Initiate and manage an intravenous infusion.	12
		Prepare and administer an injection.	12
		Perform oral and nasopharyngeal suctioning of patient.	12
		Administer morphine.	6
		Establish a sterile field.	6
		Obtain a blood specimen using a Vacutainer.	6
		Initiate a Field Medical Card.	6
		Perform a wound irrigation.	6
		Change a sterile dressing.	6
		Document patient care using SOAP format.	5
		Administer oral or topical medications.	5
Emergency Medical Treatment	23	Open the airway.	17
		Clear an upper airway obstruction.	14
		Administer external chest compressions.	14
		Perform rescue breathing.	14
		Control bleeding.	9
		Insert an oropharyngeal or nasopharyngeal airway.	4
		Treat a cardiac emergency.	4
		Treat a respiratory emergency.	4
		Set up an oxygen tank.	4
		Administer oxygen.	4
		Perform needle chest compression.	4
		Insert a Combitube.	4
Casualty Management	23	Initiate treatment for shock.	4
		Perform a trauma casualty assessment.	13
		Perform a medical casualty assessment.	13
		Manage an unconscious casualty.	10
		Immobilize a suspected fracture or dislocation.	10
		Treat lacerations, contusions, and extrusions of the eye.	9
		Treat a casualty with an open or closed chest wound.	9
		Treat a casualty with an open abdominal wound.	4
		Transport a casualty with a suspected spinal injury.	4
		Apply a dressing to an impalement injury.	4
		Treat a casualty with an open or closed head injury.	4
		Treat a casualty with a closed head wound.	4
		Treat a casualty for a heat/cold injury.	4
		Provide basic emergency treatment for painful, swollen, or deformed extremities.	4
Triage and Evacuation	20	Treat a chemical casualty in the field.	4
		Decontaminate a casualty.	4
		Triage casualties on a conventional battlefield.	30
		Triage casualties on an integrated battlefield.	30
		Load casualties onto ground evacuation platforms.	15
		Load casualties onto nonstandard vehicles.	10
		Establish a helicopter landing point.	10
Contemporary Operating Environment	17	Guide a helicopter to a landing point.	5
		PTSD/Battle stress identification and treatment.	47
		Enemy prisoner of war detainee care.	35
		Civilians on battlefield.	18

## APPENDIX G

### 88M JOB KNOWLEDGE TEST DEVELOPMENT

The 88M Transport Operator MOS is part of the training and in-unit validation, and the reclassification effort. The JKTs include a training test, a SL1 test for both the in-unit and reclassification efforts, and SL2 and SL3 tests for the reclassification effort. In this appendix we describe the creation of the tests.

#### Developing the 88M Job Knowledge Test Blueprints

To identify the job domain for skill levels 1-3, we relied mostly on the 88M STP (55-88M14-SM-TG *Soldier's Manual and Trainer's Guide 88M, Motor Transport Operator: Skill Levels 1, 2, 3, and 4*). For each skill level we organized the Performance Requirements and Categories to facilitate the development of test blueprints. We had nine BNCOC instructors complete a blueprint development exercise. The results, not surprisingly, show that the *Motor Vehicle Operations and Maintenance* Category received the highest weight for SL1 and 2. Using the blueprint exercise results, we developed the test blueprints for the classification and reclassification work. The Performance Requirements ranks determined how many points each Performance Requirement was allocated within Category. The results for SL1-3 are in Tables G.1 – G.3.

Six AIT instructors assisted with the adaptation of the existing SL1 blueprint for a training test. The changes they suggested included decreasing the weight of the *Motor Vehicle Operations and Maintenance* Category, and increasing the weight of the *Tactical Transport Operations* Category. Another set of SMEs helped with the creation of the in-unit blueprint which was also based on the existing SL1 blueprint. The in-unit Categories' weights were very similar the SL1 weights.

#### Developing the 88M Job Knowledge Test Items

HumRRO staff developed test items using the 88M STP along with several Army manuals:

- FM 21-305 *The Manual for the Wheeled Vehicle Driver*
- FM 55-30 *Army Motor Transport Units and Operations*
- TM 9-2320-364-10 *Operator's Manual for Truck, Tractor, M1074 and M1075 Palletized Load Systems (PLSs)*

These items were reviewed by internal SMEs and presented to 30 Army SMEs. In addition to reviewing the items, these SMEs provided content validity ratings. Approximately 15% of the items were dropped due to low content validity ratings and negative feedback from SMEs.

As noted previously, a group of six AIT instructors helped with the training test development work. In addition to creating the test blueprint, they reviewed SL1 items and selected those most appropriate for a training test. The in-unit SMEs similarly selected in-unit test items from the existing SL1 item bank.

**Table G.1. 88M Skill Level 1 Blueprint**

Category	%	Performance Requirement	% of Points (w/in Category)
Motor Vehicle Operations and Maintenance	45	Perform preventive maintenance checks and services (PMCS).	33
		Operate vehicle with automatic/semiautomatic transmission.	18
		Perform coupling operations.	12
		Operate vehicle in convoy.	11
		Back vehicle with trailer/semitrailer.	4
		Perform as wheel vehicle ground guide (day/night).	11
		Operate the movement tracking system (MTS).	11
Tactical Transport Operations	30	Operate vehicle under adverse conditions.	33
		Read strip maps.	27
		Operate cargo vehicle with/without trailer/semitrailer on secondary road/trails/cross-country.	23
		Operate vehicle with/without trailer/semitrailer under blackout.	17
Transport Cargo and Personnel	25	Perform tiedown procedures.	40
		Load/unload passengers for transport in a truck.	20
		Perform load/unload operations with truck PLS in automatic mode.	20
		Transfer flatrack onto/from PLS trailer using the load handling system (LHS).	20

**Table G.2. 88M Skill Level 2 Blueprint**

Category	%	Performance Requirement	% of Points (w/in Category)
Motor Vehicle Operations and Maintenance	30	Perform preventive maintenance checks and services (PMCS). (SL1)	34
		Operate vehicle with automatic/semiautomatic transmission. (SL1)	17
		Operate vehicle in convoy. (SL1)	17
		Back vehicle with trailer/semitrailer. (SL1)	7
		Perform coupling operations. (SL1)	17
		Remove and replace a tire on a wheeled vehicle/trailer. (SL2)	11
Tactical Transport Operations	25	Prepare vehicle for tactical operations. (SL2)	20
		Operate vehicle under adverse conditions. (SL1)	20
		Read strip maps. (SL1)	20
		Implement defensive procedures when under attack/ambush in convoy. (SL2)	20
		Self recover a wheeled vehicle. (SL2)	20
Transport Cargo and Personnel	25	Perform tiedown procedures. (SL1)	32
		Transport dangerous cargo on a transporter. (SL2)	28
		Conduct refueling operation using tactical refueling vehicles. (SL2)	16
		Transport classified/sensitive cargo. (SL2)	12
		Assist in ammunition loading/unloading on a transporter. (SL2)	12

**Table G.2. (Continued)**

Category	%	Performance Requirement	% of Points (w/in Category)
HET Operations	20	Operate the semitrailer auxiliary power unit (APU). (SL2)	20
		Operate the semitrailer combination with disabled bogie. (SL2)	20
		Manually steer the semitrailer. (SL2)	20
		Adjust the semitrailer gooseneck. (SL2)	20
		Adjust the semitrailer platform height. (SL2)	20

*Note.* Higher SLs subsume tasks from lower levels.

**Table G.3. 88M Skill Level 3 Blueprint**

Category	%	Performance Requirement	% of Points (w/in Category)
Squad/Section Leader Duties	25	Supervise preventive maintenance checks and services (PMCS). (SL3)	32
		Supervise the driver training program. (SL3)	28
		Supervise personnel loading/unloading equipment/cargo onto/from vehicle and semitrailer. (SL3)	26
		Supervise preparation of vehicle for movement or shipment. (SL3)	16
Motor Vehicle Operations and Maintenance	20	Perform preventive maintenance checks and services (PMCS). (SL1)	25
		Operate vehicle in convoy. (SL1)	25
		Perform coupling operations. (SL1)	25
		Operate the movement tracking system (MTS). (SL1)	25
Convoy Operations	15	Enforce driver safety rules and techniques. (SL3)	40
		Perform duties as a serial/march unit commander. (SL3)	33
		Instruct the use of maps in motor transport operations. (SL3)	27
Tactical Transport Operations	15	Read strip maps. (SL1)	33
		Implement defensive procedures when under attack/ambush in convoy. (SL2)	33
		Operate vehicle under adverse conditions. (SL1)	20
		Prepare vehicle for tactical operations. (SL2)	14
Transport Cargo and Personnel	15	Transport dangerous cargo on a transporter. (SL2)	33
		Transport classified/sensitive cargo. (SL2)	33
		Assist in ammunition loading/unloading on a transporter. (SL2)	30
		Perform tiedown procedures. (SL1)	14
HET Operations	10	Load/unload able/disabled tracked/wheeled vehicles onto/off a HET. (SL3)	50
		Drive a HET on improved roads. (SL3)	30
		Operate the semitrailer combination with disabled bogie. (SL2)	20

*Note.* Higher SLs subsume tasks from lower levels.

## APPENDIX H

### ARMY-WIDE TRAINING PERFORMANCE RATING SCALES

H-1

A. Effort					
Puts forth individual initiative in study, practice, preparation, and participation activities to complete AIT/OSUT requirements and to meet individual Soldier expectations.					
1	Tends to give up on tasks if problems arise.			Persists with tasks, even when problems arise.	
	Soldier 1	(1)	(2)	(3)	(4) (5)
	Soldier 2	(1)	(2)	(3)	(4) (5)
	Soldier 3	(1)	(2)	(3)	(4) (5)
	Soldier 4	(1)	(2)	(3)	(4) (5)
	Soldier 5	(1)	(2)	(3)	(4) (5)
2	May tune out while an instructor is speaking.			Pays attention in class and studies hard.	
	Soldier 1	(1)	(2)	(3)	(4) (5)
	Soldier 2	(1)	(2)	(3)	(4) (5)
	Soldier 3	(1)	(2)	(3)	(4) (5)
	Soldier 4	(1)	(2)	(3)	(4) (5)
	Soldier 5	(1)	(2)	(3)	(4) (5)
3	Puts off studying and practicing tasks.			Completes study and practice assignments including non-class requirements on time.	
	Soldier 1	(1)	(2)	(3)	(4) (5)
	Soldier 2	(1)	(2)	(3)	(4) (5)
	Soldier 3	(1)	(2)	(3)	(4) (5)
	Soldier 4	(1)	(2)	(3)	(4) (5)
	Soldier 5	(1)	(2)	(3)	(4) (5)

<p align="center"><b>B. Physical Fitness and Bearing</b></p> <p align="center">Participates in activities to maintain Army APFT event standards; maintains habits and hygiene conducive to health and to avoiding illness and injury; maintains self, uniforms, living areas, and barracks to Soldier standards.</p>
--

4 Tends to exhibit poor grooming and hygiene.

Dresses and carries self according to standard.

Soldier 1	(1)	(2)	(3)	(4)	(5)
Soldier 2	(1)	(2)	(3)	(4)	(5)
Soldier 3	(1)	(2)	(3)	(4)	(5)
Soldier 4	(1)	(2)	(3)	(4)	(5)
Soldier 5	(1)	(2)	(3)	(4)	(5)

5 Lacks sufficient physical endurance to complete many physical tasks.

Has physical endurance to complete demanding tasks.

Soldier 1	(1)	(2)	(3)	(4)	(5)
Soldier 2	(1)	(2)	(3)	(4)	(5)
Soldier 3	(1)	(2)	(3)	(4)	(5)
Soldier 4	(1)	(2)	(3)	(4)	(5)
Soldier 5	(1)	(2)	(3)	(4)	(5)

6 Tries to avoid exercise; barely meets fitness standards.

Meets or exceeds basic standards for physical fitness.

Soldier 1	(1)	(2)	(3)	(4)	(5)
Soldier 2	(1)	(2)	(3)	(4)	(5)
Soldier 3	(1)	(2)	(3)	(4)	(5)
Soldier 4	(1)	(2)	(3)	(4)	(5)
Soldier 5	(1)	(2)	(3)	(4)	(5)

---

## C. Personal Discipline

Behaves in a manner that is consistent with Army Core Values; demonstrates respect in word and actions towards superiors, instructors, and others; adheres to Phase IV and Phase V limitations.

- |    |  |  |
|----|--|--|
| 7  | Complains about requirements and directions; may delay or resist following directions. | Follows requirements and directions willingly.             |
|    | Soldier 1  | (1) (2) (3) (4) (5)  |
|    | Soldier 2  | (1) (2) (3) (4) (5)  |
|    | Soldier 3  | (1) (2) (3) (4) (5)  |
|    | Soldier 4  | (1) (2) (3) (4) (5)  |
|    | Soldier 5  | (1) (2) (3) (4) (5)  |
| 8  | Tends to show up late; may forget needed items.  | Shows up on time for formations, classes, and assignments. |
|    | Soldier 1  | (1) (2) (3) (4) (5)  |
|    | Soldier 2  | (1) (2) (3) (4) (5)  |
|    | Soldier 3  | (1) (2) (3) (4) (5)  |
|    | Soldier 4  | (1) (2) (3) (4) (5)  |
|    | Soldier 5  | (1) (2) (3) (4) (5)  |
| 9  | May sneak contraband items and cover up own behavior.                                  | Adheres to restrictions and regulations.                   |
|    | Soldier 1  | (1) (2) (3) (4) (5)  |
|    | Soldier 2  | (1) (2) (3) (4) (5)  |
|    | Soldier 3  | (1) (2) (3) (4) (5)  |
|    | Soldier 4  | (1) (2) (3) (4) (5)  |
|    | Soldier 5  | (1) (2) (3) (4) (5)  |
| 10 | May talk back or show disrespect toward superiors.                                     | Shows proper respect for superiors.                        |
|    | Soldier 1  | (1) (2) (3) (4) (5)  |
|    | Soldier 2  | (1) (2) (3) (4) (5)  |
|    | Soldier 3  | (1) (2) (3) (4) (5)  |
|    | Soldier 4  | (1) (2) (3) (4) (5)  |
|    | Soldier 5  | (1) (2) (3) (4) (5)  |



### C. Personal Discipline

Behaves in a manner that is consistent with Army Core Values; demonstrates respect in word and actions towards superiors, instructors, and others; adheres to Phase IV and Phase V limitations.

- |    |   |                     |  |
|----|---|---------------------|--|
| 11 | Tends to lose temper; gets into confrontations. |                     | Keeps temper in check, even when provoked. |
|    | Soldier 1                                       | (1) (2) (3) (4) (5) |  |
|    | Soldier 2                                       | (1) (2) (3) (4) (5) |  |
|    | Soldier 3                                       | (1) (2) (3) (4) (5) |  |
|    | Soldier 4                                       | (1) (2) (3) (4) (5) |  |
|    | Soldier 5                                       | (1) (2) (3) (4) (5) |  |

### D. Commitment and Adjustment to the Army

Exhibits professional Soldier development; demonstrates acceptable progress towards the completion of the solderization process.

- |    |  |                     |   |
|----|--|---------------------|---|
| 12 | Has difficulty adjusting to the Army; may be withdrawn or depressed. |                     | Is well-adjusted to Army ways; fits in. |
|    | Soldier 1  | (1) (2) (3) (4) (5) |   |
|    | Soldier 2  | (1) (2) (3) (4) (5) |   |
|    | Soldier 3  | (1) (2) (3) (4) (5) |   |
|    | Soldier 4  | (1) (2) (3) (4) (5) |   |
|    | Soldier 5  | (1) (2) (3) (4) (5) |   |
- 
- |    |   |                     |  |
|----|---|---------------------|--|
| 13 | May get frustrated and have difficulty switching gears if plans change. |                     | Takes on changes in plans or tasks with a positive attitude. |
|    | Soldier 1   | (1) (2) (3) (4) (5) |  |
|    | Soldier 2   | (1) (2) (3) (4) (5) |  |
|    | Soldier 3   | (1) (2) (3) (4) (5) |  |
|    | Soldier 4   | (1) (2) (3) (4) (5) |  |
|    | Soldier 5   | (1) (2) (3) (4) (5) |  |

## E. Support for Peers

Respects, assists, cooperates, and teams with fellow Soldiers regardless of gender, race, ethnicity, ability, or background differences; supports other Soldiers when they are in a leadership position.

- |    |   |                     |  |
|----|---|---------------------|--|
| 14 | May not notice that a peer is distressed.                   |                     | Notices when peers are ill, distressed, falling behind; offers assistance; informs supervisors as necessary. |
|    | Soldier 1   | (1) (2) (3) (4) (5) |  |
|    | Soldier 2   | (1) (2) (3) (4) (5) |  |
|    | Soldier 3   | (1) (2) (3) (4) (5) |  |
|    | Soldier 4   | (1) (2) (3) (4) (5) |  |
|    | Soldier 5   | (1) (2) (3) (4) (5) |  |
| 15 | Is reluctant to help peers; lets peers struggle with tasks. |                     | Willingly pitches in to help peers.  |
|    | Soldier 1   | (1) (2) (3) (4) (5) |  |
|    | Soldier 2   | (1) (2) (3) (4) (5) |  |
|    | Soldier 3   | (1) (2) (3) (4) (5) |  |
|    | Soldier 4   | (1) (2) (3) (4) (5) |  |
|    | Soldier 5   | (1) (2) (3) (4) (5) |  |
| 16 | Does not work well with peers from diverse backgrounds.     |                     | Treats peers with respect, regardless of cultural, racial or other differences.                              |
|    | Soldier 1   | (1) (2) (3) (4) (5) |  |
|    | Soldier 2   | (1) (2) (3) (4) (5) |  |
|    | Soldier 3   | (1) (2) (3) (4) (5) |  |
|    | Soldier 4   | (1) (2) (3) (4) (5) |  |
|    | Soldier 5   | (1) (2) (3) (4) (5) |  |

## F. Peer Leadership

When assigned to AIT/OSUT leadership position, demonstrates resourcefulness, authority, and responsibility commensurate with the situation, position, and their ability.

17	Needs assistance of cadre to accomplish leadership assignments.						Maintains control of peers and accomplishes assignments without assistance when assigned as a leader.
	Soldier 1	(1)	(2)	(3)	(4)	(5)	
	Soldier 2	(1)	(2)	(3)	(4)	(5)	
	Soldier 3	(1)	(2)	(3)	(4)	(5)	
	Soldier 4	(1)	(2)	(3)	(4)	(5)	
	Soldier 5	(1)	(2)	(3)	(4)	(5)	
18	Tends to be either overly lax or too authoritative toward peers when assigned as leader.						Gains the cooperation of peers when assigned as leader.
	Soldier 1	(1)	(2)	(3)	(4)	(5)	
	Soldier 2	(1)	(2)	(3)	(4)	(5)	
	Soldier 3	(1)	(2)	(3)	(4)	(5)	
	Soldier 4	(1)	(2)	(3)	(4)	(5)	
	Soldier 5	(1)	(2)	(3)	(4)	(5)	
19	May avoid leader roles or, if assigned, give direction timidly.						Takes on leader roles as assigned and gives clear direction to peers.
	Soldier 1	(1)	(2)	(3)	(4)	(5)	
	Soldier 2	(1)	(2)	(3)	(4)	(5)	
	Soldier 3	(1)	(2)	(3)	(4)	(5)	
	Soldier 4	(1)	(2)	(3)	(4)	(5)	
	Soldier 5	(1)	(2)	(3)	(4)	(5)	

G. Common Task/Warrior Tasks Knowledge and Skill									
--	--	--	--	--	--	--	--	--	--

Acquires and demonstrates Common Task Test requirements and proficiency in Warrior Task/Drill training.									
---	--	--	--	--	--	--	--	--	--

20	Has problems performing some Common/Warrior Tasks to standard.								Performs all Common/Warrior tasks effectively.
	Soldier 1	(1)	(2)	(3)	(4)	(5)			
	Soldier 2	(1)	(2)	(3)	(4)	(5)			
	Soldier 3	(1)	(2)	(3)	(4)	(5)			
	Soldier 4	(1)	(2)	(3)	(4)	(5)			
	Soldier 5	(1)	(2)	(3)	(4)	(5)			

H. MOS Qualification Knowledge and Skill									
--	--	--	--	--	--	--	--	--	--

Acquires and demonstrates AIT/OSUT knowledge and skills required for MOS qualification.									
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21	Has problems performing some MOS tasks to standard.								Performs all MOS tasks to standard.
	Soldier 1	(1)	(2)	(3)	(4)	(5)			
	Soldier 2	(1)	(2)	(3)	(4)	(5)			
	Soldier 3	(1)	(2)	(3)	(4)	(5)			
	Soldier 4	(1)	(2)	(3)	(4)	(5)			
	Soldier 5	(1)	(2)	(3)	(4)	(5)			

## APPENDIX I

### ARMY-WIDE IN-UNIT PERFORMANCE RATING SCALES

A. Performing Core Warrior Tasks Performs most Core Warrior Tasks (e.g., navigation, first aid, weaponry, maintenance) competently and safely.						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Is not able to perform most Core Warrior Tasks.</li> <li>– Requires constant supervision.</li> </ul>		<ul style="list-style-type: none"> <li>– Performs most Core Warrior Tasks competently.</li> <li>– Requires some supervision under difficult conditions.</li> </ul>		<ul style="list-style-type: none"> <li>– Performs almost all Core Warrior Tasks extremely effectively.</li> <li>– Requires little or no supervision, even under difficult conditions.</li> </ul>		

B. Performing MOS-Specific Tasks Performs MOS-specific work assignments; keeps informed of MOS and assignment changes.						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Requires constant supervision to perform assigned MOS tasks.</li> <li>– Does not seek information about changes relevant to MOS or assignment.</li> </ul>		<ul style="list-style-type: none"> <li>– Handles most MOS task-related problems effectively.</li> <li>– Seeks information about changes relevant to MOS or assignment when told.</li> </ul>		<ul style="list-style-type: none"> <li>– Handles even difficult MOS task-related problems effectively.</li> <li>– Makes an extra effort to keep informed of all changes relevant to MOS or assignment.</li> </ul>		

C. Communicating with Others Speaks clearly and concisely; conveys intended message verbally and in writing.						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Rambles or does not speak clearly.</li> <li>– States ideas unclearly so the intended message is not conveyed.</li> <li>– Writes documents containing numerous, obvious errors making the document very difficult to understand.</li> </ul>		<ul style="list-style-type: none"> <li>– Usually speaks clearly and concisely.</li> <li>– Usually states ideas or information clearly so the message is conveyed.</li> <li>– Writes understandable documents even though they may contain a few punctuation or grammatical errors.</li> </ul>		<ul style="list-style-type: none"> <li>– Communicates even detailed or obscure information effectively.</li> <li>– Conveys very detailed messages completely and accurately.</li> <li>– Writes virtually error-free and easy-to-read documents.</li> </ul>		

D. Processing Information Monitors, interprets, and organizes information.						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Is easily overwhelmed if given too much information or information from multiple sources.</li> <li>– Has difficulty determining relevance and importance of information.</li> </ul>		<ul style="list-style-type: none"> <li>– Handles day-to-day information load, but may be overwhelmed by multiple information sources.</li> <li>– Is able to process information, but sometimes fails to combine or exclude information.</li> </ul>		<ul style="list-style-type: none"> <li>– Effectively handles large amounts of information, regardless of source.</li> <li>– Processes information effectively so it is optimally useful.</li> </ul>		

E. Solving Problems Adapts to new problem situations; applies prior training, rules, and strategies correctly; weighs alternatives when making decisions; develops novel solutions to problems; completes tasks despite major changes.						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Does not apply previous training or experience to problem situations; becomes frustrated.</li> <li>– Blindly applies rules or strategies, regardless of the situation.</li> <li>– Fails to consider even obvious alternative solutions.</li> <li>– Does not adapt quickly to new environments, people, or equipment.</li> <li>– Not able to complete job if faced with major changes.</li> </ul>		<ul style="list-style-type: none"> <li>– Applies previous experience or training to new problem situations, but may do so inappropriately at times.</li> <li>– Applies appropriate rules or strategies to routine situations or problems.</li> <li>– Considers the obvious costs and benefits of alternative solutions.</li> <li>– Modifies behavior when faced with unexpected events or conditions.</li> <li>– Completes job, but may take longer to do so if faced with major changes.</li> </ul>		<ul style="list-style-type: none"> <li>– Effectively and appropriately applies previous experience and training to new problem situations.</li> <li>– Analyzes difficult situations effectively and always applies the appropriate rules or strategies.</li> <li>– Considers all costs and benefits of each alternative solution.</li> <li>– Develops innovative and imaginative approaches to dealing with unexpected events or conditions.</li> <li>– Ensures job is completed efficiently, even if faced with major changes.</li> </ul>		

<p><b>F. Exhibiting Effort</b></p> <p>Completes work in a timely manner; puts extra effort into completing work; seeks challenging assignments; persists in carrying out difficult assignments and responsibilities even under adverse and stressful conditions.</p>						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Frequently fails to meet deadlines.</li> <li>– Cannot complete job in high-pressure situations.</li> <li>– Gives up when asked to perform difficult assignments or responsibilities.</li> <li>– Puts little effort or initiative in accomplishing even simple tasks without supervision.</li> <li>– Refuses or ignores opportunities to take additional responsibilities.</li> </ul>		<ul style="list-style-type: none"> <li>– Usually completes assignments on time.</li> <li>– Stress affects job performance to some extent in high-pressure situations.</li> <li>– Completes difficult assignments and responsibilities, even if it takes longer than usual.</li> <li>– Puts forth sufficient effort to accomplish most tasks; puts forth extra effort when told.</li> <li>– Accepts additional responsibilities; may occasionally seek out challenging assignments.</li> </ul>			<ul style="list-style-type: none"> <li>– Completes almost all assignments on time.</li> <li>– Ensures jobs are completed, even in high pressure situations.</li> <li>– Efficiently completes difficult assignments and responsibilities.</li> <li>– Often puts forth extra effort to accomplish tasks effectively, even under difficult conditions; does so without supervision.</li> <li>– Seeks out and enthusiastically takes on challenging assignments and additional responsibilities.</li> </ul>	

<p><b>G. Exhibiting Personal Discipline</b></p> <p>Exhibits selfless service orientation; exhibits integrity and discipline both on and off the battlefield; follows instructions, rules, and regulations.</p>						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Fails to adhere to Army standards and values.</li> <li>– Is disrespectful toward superiors; may ignore or refuse to follow orders.</li> <li>– Takes part in prohibited activities.</li> <li>– Exhibits little or no self-control or discipline on the job.</li> </ul>		<ul style="list-style-type: none"> <li>– Generally adheres to Army standards and values.</li> <li>– Follows direct orders with little or no complaint; is usually respectful to superiors.</li> <li>– Usually resists taking part in prohibited activities, but might give in to peer pressure.</li> <li>– Generally exhibits self-control and discipline on the job.</li> </ul>			<ul style="list-style-type: none"> <li>– Consistently adheres to Army standards and values.</li> <li>– Follows orders willingly; is always respectful to superiors.</li> <li>– Resists even strong peer pressure to take part in prohibited activities.</li> <li>– Always exhibits strong self-control and discipline on the job.</li> </ul>	

H. Contributing to the Team						
Treats team members courteously and respectfully; provides help and assistance to others; contributes to achieving team goals.						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Is often rude and insensitive to peers' concerns; may harass or put down other Soldiers.</li> <li>– Refuses to help others unless ordered to do so.</li> <li>– Neglects own assigned tasks, creating more work for others.</li> <li>– Does not put in effort to meet team goals, even when given encouragement.</li> </ul>		<ul style="list-style-type: none"> <li>– Usually treats peers courteously and respectfully.</li> <li>– Provides assistance when clearly needed or when asked.</li> <li>– Performs assigned team tasks; occasionally volunteers for extra duties to help team.</li> <li>– Puts in effort to achieve team goals, but may need some encouragement.</li> </ul>			<ul style="list-style-type: none"> <li>– Unfailingly treats peers courteously and respectfully.</li> <li>– Notices when others need help and offers assistance without being asked.</li> <li>– Always performs assigned team tasks and eagerly volunteers for extra duties to help team.</li> <li>– Willingly puts in required effort to ensure team goals are achieved.</li> </ul>	

I. Exhibiting Fitness and Bearing						
Meets Army standards for physical fitness, strength, and weight; displays military bearing; meets Army standards for AR 670-1.						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Takes action to meet Army physical standards only when ordered to do so.</li> <li>– Usually displays poor military bearing.</li> <li>– Appearance not in accordance with AR 670-1.</li> </ul>		<ul style="list-style-type: none"> <li>– Takes action to meet Army physical standards as necessary.</li> <li>– Usually maintains good military bearing.</li> <li>– Maintains Army standards for appearance in AR 670-1.</li> </ul>			<ul style="list-style-type: none"> <li>– Works diligently to maintain excellent physical condition.</li> <li>– Consistently maintains excellent military bearing.</li> <li>– Appearance exceeds Army standards in AR 670-1.</li> </ul>	



J. Interacting with Indigenous People and Soldiers from other Countries						
Demonstrates tolerance and respect of other cultural and social backgrounds; willing to work and communicate with those from different backgrounds.						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Is intolerant of people from other cultures and social backgrounds.</li> <li>– May refuse to work with people of other backgrounds; may refuse to accept cultural differences.</li> <li>– Makes insensitive comments or slurs to or about others based on social or cultural differences.</li> </ul>		<ul style="list-style-type: none"> <li>– Demonstrates tolerance and respect of other cultural and social backgrounds.</li> <li>– Willing to work and communicate with those from different backgrounds, but may be uneasy with some cultures.</li> <li>– Keeps an open mind about those from other cultural and social backgrounds.</li> </ul>			<ul style="list-style-type: none"> <li>– Respects other cultures and makes an effort to understand them.</li> <li>– Easily works, socializes, and communicates well with others, regardless of background.</li> <li>– Takes it upon self to learn more about other cultures to make interactions easier.</li> </ul>	

K. Following Safety Procedures						
Follows safety procedures; recognizes and responds to possible dangerous or hazardous situations						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Ignores safety instructions or warnings; needs special help and reminders.</li> <li>– Fails to recognize unsafe conditions or responds improperly.</li> </ul>		<ul style="list-style-type: none"> <li>– Follows safety instructions; adheres to safety warnings, briefings, and instructions.</li> <li>– Recognizes and responds appropriately to unsafe conditions.</li> </ul>			<ul style="list-style-type: none"> <li>– Is very alert to safety restrictions and instructions; reminds others of safety requirements.</li> <li>– Recognizes and responds appropriately to potential safety problems that many Soldiers might overlook.</li> </ul>	

L. Developing Own Skills						
Stays up to date with his or her professional skills by seeking out additional education and training opportunities; commits to learning new things required by technology, mission, or situation.						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Refuses additional responsibilities that might improve job skills.</li> <li>– Does not participate in relevant career training opportunities.</li> <li>– Resists learning new things; prefers to use old methods.</li> </ul>		<ul style="list-style-type: none"> <li>– Accepts responsibilities to improve job skills; may need to be encouraged to do so.</li> <li>– Participates in required courses/training.</li> <li>– Capable of learning new things and willing to do so.</li> </ul>		<ul style="list-style-type: none"> <li>– Actively seeks additional responsibilities to improve job skills and increase chance of promotion.</li> <li>– Studies and works during off-duty hours to improve job-related skills.</li> <li>– Readily and effectively takes on the challenge of learning new things.</li> </ul>		

M. Managing Personal Matters						
Manages personal life, including personal finances, Family, and personal well-being.						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Does not fulfill commitments to personal life; may get behind on finances.</li> <li>– May go on deployment without making arrangements for personal matters (e.g., car payments).</li> </ul>		<ul style="list-style-type: none"> <li>– Fulfills major commitments to personal life; handles financial matters; may need to be reminded by Family or colleagues.</li> <li>– Ensures most essential personal matters are taken care of before being deployed; may need to be reminded by Family or colleagues.</li> </ul>		<ul style="list-style-type: none"> <li>– Always fulfills commitments to personal life; stays on top of personal finances and budget.</li> <li>– Ensures all personal matters will be well-managed before deployment.</li> </ul>		

<p><b>N. Leadership Potential</b></p> <p>On this rating scale, evaluate each Soldier on his or her potential effectiveness as an NCO. At this point, you are not to rate on the basis of present performance and effectiveness, but instead indicate how well each Soldier is likely to perform as an NCO.</p>						
1	2	3	4	5	6	7
Likely to be a bottom level performer as an NCO.		Likely to be an adequate performer as an NCO.			Likely to be a top-level performer as an NCO.	

## APPENDIX J

### MOS-SPECIFIC TRAINING PERFORMANCE RATING SCALES

#### 11B TRAINING PERFORMANCE RATING SCALES

A. Learns First Aid						
How well has the Soldier learned to evaluate injuries and administer the appropriate treatment?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Is unsure checking airway and breathing; may use incorrect procedures.</li> </ul>		<ul style="list-style-type: none"> <li>– Follows proper procedures for checking airway and breathing.</li> </ul>		<ul style="list-style-type: none"> <li>– Demonstrates complete confidence and skill in checking airway and breathing; checks responsiveness and establishes airway without error.</li> </ul>		
<ul style="list-style-type: none"> <li>– Is extremely slow in applying basic first aid techniques (for bleeding, shock, field dressings/splints); may do so incorrectly.</li> </ul>		<ul style="list-style-type: none"> <li>– Applies basic first aid techniques properly (for bleeding, shock field dressings/splints), but may not do so quickly.</li> </ul>		<ul style="list-style-type: none"> <li>– Quickly performs the correct basic first aid techniques (for bleeding, shock, field dressings/splints).</li> </ul>		
<ul style="list-style-type: none"> <li>– Is extremely slow in applying advanced lifesaving techniques (e.g., establishing IV, chest decompression, breathing airway, and tourniquets) or does so incorrectly.</li> </ul>		<ul style="list-style-type: none"> <li>– Applies advanced lifesaving techniques (e.g., establishing IV, chest decompression, breathing airway, and tourniquets).</li> </ul>		<ul style="list-style-type: none"> <li>– Quickly and skillfully applies advanced lifesaving techniques (e.g., chest decompression, breathing airway, and tourniquets); gets a first-time go when administering IV.</li> </ul>		

B. Learns to Use Aiming Devices and Night Vision Devices						
How well has the Soldier learned to engage targets with aiming devices, to zero sights, and to operate night vision devices (NVD)?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Is unable to engage targets with bore light and other aiming devices; needs lots of help.</li> </ul>		<ul style="list-style-type: none"> <li>– Is able to engage targets with bore light and other aiming devices with practice and coaching.</li> </ul>		<ul style="list-style-type: none"> <li>– Is extremely skilled in engaging targets with all types of aiming devices.</li> </ul>		
<ul style="list-style-type: none"> <li>– Cannot zero sights/NVD accurately, in daylight or at night; does not understand field zero.</li> </ul>		<ul style="list-style-type: none"> <li>– Zeroes sights/NVD accurately, but not quickly, both in daylight and at night; can apply field zero.</li> </ul>		<ul style="list-style-type: none"> <li>– Zeroes sights/NVD quickly and accurately both in daylight and at night; applies field and expedient zero methods.</li> </ul>		

C. Learns to Use Weapons, Machineguns, Hand Grenades						
How well has the Soldier learned to use and maintain individual weapons, machineguns, antitank weapons, hand grenades, mines, and pyrotechnics?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Is careless around weapons; needs monitoring and observation.</li> <li>– Has difficulty in disassembling, assembling and performing function checks on M16, M203, M249 and M240; needs extra help.</li> <li>– Is uncertain when employing grenades or uses incorrect procedures.</li> </ul>		<ul style="list-style-type: none"> <li>– Follows weapon safety procedures with minimum reminders and supervision.</li> <li>– Disassembles, assembles and performs function checks on M16, M203, M249 and M240; may require help on some weapons.</li> <li>– Uses grenades appropriately and with minimal coaching.</li> </ul>		<ul style="list-style-type: none"> <li>– Is extremely safety conscious around weapons; reminds others of safety procedures.</li> <li>– Disassembles, assembles and performs function checks on M16, M203, M249 and M240.</li> <li>– Demonstrates confidence during grenade exercise and follows grenade procedures without error.</li> </ul>		

D. Learns Fire and Movement Techniques						
How well has the Soldier learned to perform individual, buddy, and fire team tactical movement and fires?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Has problems getting into or maintaining position; does not provide fire support or position self as required.</li> <li>– Picks poor covered/covering position during movement.</li> <li>– Operates poorly in urban conditions; is often out of position or fails to provide cover.</li> </ul>		<ul style="list-style-type: none"> <li>– Generally demonstrates understanding of individual, buddy, and fire team movement and fire support.</li> <li>– Usually picks adequate covered/covering positions during most movement situations.</li> <li>– Understands urban operations; is usually correctly positioned and provides fire support as directed.</li> </ul>		<ul style="list-style-type: none"> <li>– Consistently anticipates positioning and movement requirements; provides effective and safe fire support.</li> <li>– Is extremely skilled in selecting covered/covering positions in all movement situations.</li> <li>– Is extremely knowledgeable about urban operations; anticipates positions and fire support in reaction to the situation.</li> </ul>		

E. Learns Defensive Operations						
How well has the Soldier learned to perform defensive operations including preparing and occupying individual and team defensive fighting positions and Forward Operating Base (FOB) operations?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>Does not follow principles of security in FOB.</li> <li>Violates noise and light discipline; does not understand or use hand and arm signals correctly.</li> <li>Is unable to construct fighting position quickly; does not camouflage position correctly.</li> </ul>		<ul style="list-style-type: none"> <li>Applies principles of security in FOB.</li> <li>Generally maintains noise and light discipline; understands and uses basic hand and arm signals correctly.</li> <li>Constructs effective fighting positions in a reasonable amount of time; ensures position is camouflaged.</li> </ul>		<ul style="list-style-type: none"> <li>Extremely knowledgeable about principles of security operations in FOB.</li> <li>Consistently maintains noise and light discipline; understands and uses appropriate hand signals and arm signals, even in difficult situations.</li> <li>Prepares “by-the-book” fighting position quickly; uses camouflage effectively.</li> </ul>		

F. Learns Squad Tactics						
How well has the Soldier learned squad tactics, including performing squad battle drills?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>Fails to remain alert when on outpost duty; may fail to detect an enemy approaching the post or does not report a suspicious sighting.</li> <li>Cannot perform battle drills correctly; does not maneuver properly, lay down suppressive fire or react properly to the tactical situation.</li> </ul>		<ul style="list-style-type: none"> <li>Remains alert and attentive on outpost duty; identifies and reports most suspicious activity.</li> <li>Completes most battle drills correctly; maneuvers properly, lays down suppressive fire and reacts properly to most tactical situations.</li> </ul>		<ul style="list-style-type: none"> <li>Is extremely alert and attentive on outpost duty; accurately discriminates and reports all suspicious activity.</li> <li>Completes all battle drills correctly; maneuvers without hesitation, lays down suppressive fire and correctly assesses and reacts to all tactical situations.</li> </ul>		

G. Learns Rules of Engagement						
How well has the Soldier learned the rules of engagement (ROE)?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>Does not know or understand rules on use of force; fails to follow ROE during tactical exercises and vignettes.</li> <li>During situational training exercise (STX), does not properly follow procedures for processing detainees or interacting with civilians.</li> </ul>		<ul style="list-style-type: none"> <li>Adequately understands the steps in use of force; complies with ROE in tactical exercises and vignettes.</li> <li>During STX, generally follows proper procedures for processing detainees; reacts adequately in STX involving civilians.</li> </ul>		<ul style="list-style-type: none"> <li>Demonstrates complete understanding of the steps in use of force; fully complies with ROE in tactical exercises and vignettes and enforces ROE with other Soldiers.</li> <li>During STX, demonstrates exceptional skill in processing detainees and in dealing with civilians; enforces detainee/civilian procedures in other Soldiers.</li> </ul>		

H. Learns Safety Procedures						
How well has the Soldier learned to follow safety procedures, being alert to possible dangerous or hazardous situations and taking steps to protect self, other Soldiers, and equipment?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>Is careless in safety awareness; needs special help and reminders.</li> <li>Fails to recognize unsafe conditions or responds improperly.</li> </ul>		<ul style="list-style-type: none"> <li>Follows safety instructions; adheres to safety warnings, briefings, and instructions.</li> <li>Recognizes and responds appropriately to unsafe conditions.</li> </ul>		<ul style="list-style-type: none"> <li>Is very alert to safety restrictions and instructions; reminds others of safety requirements.</li> <li>Recognizes potential vehicle or safety problems that many Soldiers might overlook.</li> </ul>		

## 19K TRAINING PERFORMANCE RATING SCALES

<p>A. Learns General Tank Crew Operations</p> <p>How well has the Soldier learned to function as a member of a tank crew, including operating the tank, operating tank radios, and conducting crew drills to evacuate injured crew members?</p>						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Is unsure; does not interact on his own with other crew members; does not show expected awareness and knowledge of tank operation.</li> <li>– When performing crew drill, does not know how to handle an injured crewman; takes too much time or puts the crewmember to further risk or injury; does not work with other crew in evacuation.</li> <li>– Does not demonstrate knowledge of radio-telephone (RT) procedures; cannot operate tank radios without help.</li> </ul>		<ul style="list-style-type: none"> <li>– Demonstrates an understanding of most tank operations; is mindful of and interacts with other crew members; appears comfortable operating in a tank environment.</li> <li>– Follows crew drill evacuation procedures for an injured crewmember correctly.</li> <li>– Can set up radio on correct frequency and properly send/receive communications; uses ANCD (Automated Network Control Device) properly; sometimes may need help.</li> </ul>		<ul style="list-style-type: none"> <li>– Demonstrates exceptional confidence and knowledge of tank operations and of how tank crews interact; appears very confident performing in a tank environment.</li> <li>– Executes crew drill for injured crewmember evacuation exceptionally well; coordinates actions with other crew; completes extraction quickly and safely.</li> <li>– Demonstrates knowledge of all RT procedures; operates radios and ANCD without help.</li> </ul>		

B. Learns Operation and Maintenance of Tank-Mounted Machine Guns						
How well has the Soldier learned to maintain tank-mounted machine guns (loader's machinegun, coax, and Cal .50) and to follow procedures for mounting and dismounting?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>Needs assistance in disassembly/assembly; careless in cleaning components and in safeguarding and accounting for components during disassembly and maintenance.</li> <li>Has difficulty mounting/dismounting the coax; needs lots of help.</li> <li>Does not coordinate or work with other crew in dismounting/mounting Cal .50.</li> </ul>		<ul style="list-style-type: none"> <li>Demonstrates reasonable skill in disassembly/assembly of all machineguns; may need help on some weapons; accounts for all components; correctly cleans, lubricates, and completes function check on weapons.</li> <li>Can dismount and mount the coax correctly.</li> <li>Coordinates steps with other crew in dismounting/ mounting Cal .50.</li> </ul>			<ul style="list-style-type: none"> <li>Demonstrates exceptional skill and works quickly on disassembly/assembly of all machineguns, without additional help; is very thorough on inspection, maintenance, and lubrication.</li> <li>Dismounts, and mounts the coax with speed and precision.</li> <li>Plans actions with other crew and efficiently dismounts and mounts Cal .50.</li> </ul>	

C. Learns Tank Driver Functions and Operations						
How well has the Soldier learned to perform procedures for driver preparation, starting, and shut down; to follow and act as a ground guide, and to drive the tank in varied terrain and tactical and non-tactical conditions?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>Is a poor or uncertain driver; does not anticipate changes in terrain or road conditions and places vehicle or crew at risk; cannot control vehicle.</li> <li>Without additional help, fails to follow proper procedures for start up, operation, and stopping.</li> <li>Fails to understand or to follow ground guides signals when driving; performs poorly as ground guide.</li> </ul>		<ul style="list-style-type: none"> <li>Drives adequately. Usually anticipates changes and avoids risk conditions; operates well in simulated and operational driving.</li> <li>Uses correct procedures to start-up, operate, and shut down tanks; needs minimal help.</li> <li>Understands and follows ground guide signals adequately as a driver; can perform as a ground guide under normal conditions.</li> </ul>			<ul style="list-style-type: none"> <li>Demonstrates exceptional driving skill; expects and reacts very well to abnormal conditions in simulated and operational driving; is a confident and careful driver.</li> <li>Demonstrates exceptional understanding of driver procedures; monitors driver's operational indicators and driving cues and takes appropriate actions.</li> <li>Understands and reacts correctly to ground guide directions, even under abnormal conditions; can perform effectively as ground guide in difficult movement situations.</li> </ul>	



D. Learns Tank Maintenance Functions						
How well has the Soldier learned to perform tank PMCS, following TM procedures and correctly identifying and reacting to maintenance indicators and requirements?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>Does not properly follow the TM or understand PMCS requirements for the tank; fails to identify or react to maintenance indicators.</li> <li>Is unable to complete DA Form 5988E or completes it incorrectly; needs help.</li> <li>Does not understand maintenance procedures; misses defects and makes mistakes when inspecting for and correcting deficiencies.</li> </ul>		<ul style="list-style-type: none"> <li>Follows the TM PMCS requirements; identifies most maintenance conditions and requirements.</li> <li>Completes DA Form 5988E correctly; may need some help.</li> <li>Generally understands and is able to apply maintenance procedures; adequately identifies and corrects most defects.</li> </ul>			<ul style="list-style-type: none"> <li>Thoroughly and accurately follows the TM; identifies all deficient conditions and identifies the appropriate corrective action.</li> <li>Fills out DA Form 5888E completely and accurately.</li> <li>Demonstrates an exceptional understanding of maintenance procedures.</li> </ul>	

E. Learns Gunnery Operations						
How well has the Soldier learned to perform gunnery operations, including observing and acquiring targets, reacting to fire commands, and functioning as a loader during engagements?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>As a loader, has problems identifying ammunition; has difficulty following procedures in handling, loading, and performing loader's sequence steps; has trouble lifting and loading rounds. Is slow; delays engagements.</li> <li>Does not know, misunderstands or hesitates in reacting to fire commands; needs prompting.</li> <li>When using loader's M240, does not know or observe sector; does not correctly announce or engage targets or violates safety rules.</li> </ul>		<ul style="list-style-type: none"> <li>Demonstrates acceptable progress as a loader; knows and is able to follow correct loading procedures; needs some prompting; has few physical problems handling rounds; does not delay engagements.</li> <li>Responds adequately and correctly to fire commands.</li> <li>Demonstrates acceptable knowledge and follows correct procedures when engaging targets with loader's M240; may need some prompting.</li> </ul>			<ul style="list-style-type: none"> <li>Demonstrates exceptional skill and effectiveness as a loader; does not make procedural errors; loads the main gun within the minimal time from the fire command.</li> <li>Anticipates actions in response to fire commands; responds both quickly and correctly.</li> <li>Identifies and observes sector without direction; acquires and announces targets; engages targets with loader's M240 accurately, correctly, and safely.</li> </ul>	

F. Learns Security Operations						
How well has the Soldier learned to perform security operations in a dismounted role?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Cannot prepare a call for fire without a lot of additional help; leaves out information or submits inaccurate/incorrect information.</li> <li>– Picks poor location for listening post/observation post (LP/OP); fails to establish cover and concealment; does not stay alert or observant when manning; does not observe light/noise discipline.</li> <li>– When moving dismounted, violates noise and light discipline; fails to use or understand hand and arm signals correctly; fails to understand or maintain formations.</li> </ul>		<ul style="list-style-type: none"> <li>– Can prepare and issue a complete call for fire; may need some additional help and may be somewhat slow.</li> <li>– Usually picks adequate LP/OP locations; generally improves position; is alert and pays attention to manning position, but need prompting.</li> <li>– When moving dismounted, generally maintains noise and light discipline; understands and uses basic hand and arm signals adequately; is alert, observant and follows formations.</li> </ul>			<ul style="list-style-type: none"> <li>– Accurately calls for fire; issues call well within accepted time requirements.</li> <li>– Is skilled in selecting, improving, and manning OP/LP; is knowledgeable and observant of light/noise discipline; remains alert and observant, even when tired.</li> <li>– When moving dismounted, always observes noise and light discipline; understands and uses appropriate hand and arm signals even in unusual or time-driven situations; anticipates formation requirements and places self in correct position.</li> </ul>	

G. Learns Safety Procedures						
How well has the Soldier learned to follow safety procedures, being alert to possible dangerous or hazardous situations and taking steps to protect self, other Soldiers, and equipment?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Is careless in safety awareness; needs special help and reminders.</li> <li>– Fails to recognize unsafe conditions or responds improperly.</li> </ul>		<ul style="list-style-type: none"> <li>– Follows safety instructions; adheres to safety warnings, briefings, and instructions.</li> <li>– Recognizes and responds appropriately to unsafe conditions.</li> </ul>			<ul style="list-style-type: none"> <li>– Is very alert to safety restrictions and instructions; reminds others of safety requirements.</li> <li>– Recognizes potential vehicle or safety problems that many Soldiers might overlook.</li> </ul>	

### 31B TRAINING PERFORMANCE RATING SCALES

<b>A. Weapons</b> How well has the Soldier learned to use and maintain individual weapons and machine guns?						
1	2	3	4	5	6	7
– Is careless around weapons; needs monitoring and observation.		– Follows weapon safety procedures with minimum reminders and supervision.		– Is extremely safety conscious around weapons; reminds others of safety procedures.		
– Has difficulty in disassembling, assembling and performing function checks on M9, MK19, and M249; needs extra help.		– Disassembles, assembles and performs function checks on M9, MK19, and M249; may require help on some weapons.		– Disassembles, assembles and performs function checks on M9, MK19, and M249.		
– Requires more than 2 refires to qualify with M9.		– Qualifies Marksman with M9 in 2 or fewer attempts.		– Qualifies Sharpshooter or Expert with M9.		

<b>B. Combat Techniques</b> How well has the Soldier learned to detect explosive hazards, move as part of a fire team, and react to indirect fire while mounted?						
1	2	3	4	5	6	7
– Recognizes few indicators of explosive hazards and fails to notify supervisors.		– Recognizes most indicators of explosive hazards and notifies supervisors accordingly.		– Recognizes all indicators of explosive hazards and immediately notifies supervisors.		
– Fails to assume correct position when dismounted; needs a lot of guidance as formation changes.		– Generally assumes correct position while dismounted, even as formation changes.		– Always assumes correct position while dismounted, even as formation changes.		
– Does not react appropriately while under indirect fire; fails to analyze or report situation; unsure of how to continue mission.		– Reacts appropriately while under indirect fire; efficiently analyzes and reports situation; continues mission with little guidance.		– Reacts quickly and confidently while under indirect fire; efficiently analyzes and reports situation; continues mission without help.		

### C. Area Security

How well has the Soldier learned to function as a member of a scout, lead, or trail team while providing security for a convoy in a tactical environment?

1	2	3	4	5	6	7
– Has poor understanding of team position assignments from the squad leader.		– Shows adequate understanding of team position assignments from the squad leader.		– Shows exceptional understanding of team position assignments from the squad leader.		
– Is not able, without direction, to maintain an acceptable level of situational awareness during convoy security operations.		– Is able to maintain a sufficient level of situational awareness during convoy security operations.		– Is able to maintain a high level of situational awareness during convoy security operations.		
– Fails to recognize threats to the convoy; does not take action to avoid them.		– Recognizes most threats to the convoy and takes appropriate action to avoid them.		– Recognizes all threats to the convoy and takes immediate action to avoid them.		

### D. Detainee Operations

How well has the Soldier learned to handle and transport Detainees; learned to inspect and guard Detainment/Corrections facilities?

1	2	3	4	5	6	7
– Shows tendency to mistreat Detainees; does not follow standards of conduct.		– Follows the standards of conduct in handling Detainees.		– Enforces standards of conduct and leads by example when handling Detainees.		
– Does not know or understand rules on use of force (RUF); fails to follow ROE in Detainee situations during tactical exercises and vignettes.		– Adequately knows and applies ROE/RUF in Detainee situations during tactical exercises and vignettes.		– Shows complete understanding of the steps in use of force; fully complies with ROE in tactical exercises and vignettes and enforces ROE with other Soldiers in all Detainee situations.		
– Shows a lack of sensitivity to cultural factors and how they impact the mission.		– Understands how cultural factors impact the mission.		– Shows in-depth knowledge of cultural factors and how they impact the mission.		

#### E. Maneuver and Mobility Support Operation (MMSO)

How well has the Soldier learned to operate traffic control points, dismount points and roadblocks; and learned to control traffic at defiles and holding areas as a team member?

1	2	3	4	5	6	7
– Shows little understanding of team leader instructions; needs constant reminding.		– Shows basic understanding of team leader instructions, needs little reminding.		– Shows exceptional understanding of team leader instructions, needs no reminding.		
– Fails to apply rules of engagement (ROE) in most traffic control situations.		– Generally applies correct ROE to monitor and control traffic in most situations.		– Consistently applies correct ROE to monitor and control traffic in all situations.		

#### F. Vehicle Operations

How well has the Soldier learned to maintain and operate wheeled vehicles in tactical and non-tactical conditions?

1	2	3	4	5	6	7
– Does not properly follow the technical manual (TM) or understand preventative maintenance checks and services (PMCS) requirements for the vehicle; fails to identify or react to maintenance problems.		– Follows the TM and PMCS requirements; identifies most maintenance problems and requirements.		– Carefully and accurately follows TM; identifies all maintenance problems and identifies the correct action.		
– Is a poor or uncertain driver; does not anticipate changes in terrain or road conditions and places vehicle or crew at risk.		– Drives adequately; usually anticipates changes and avoids risk conditions; is a careful driver.		– Shows exceptional driving skill; expects and reacts very well to unusual conditions; is a confident and careful driver.		
– Shows poor situational awareness while operating wheeled vehicle in threat environment; is confused by or fails to react to instructions from command vehicles.		– Shows good situational awareness while operating wheeled vehicle in threat environment; reacts well to instructions from command vehicles.		– Shows exceptional situational awareness while operating wheeled vehicle in threat environment; reacts quickly to instructions from command vehicles.		

#### G. Law Enforcement

How well has the Soldier learned the requirements of crime prevention and detection, apprehension and the safeguarding of evidence?

1	2	3	4	5	6	7
– Does not understand or cannot apply the principles of apprehension and arrest without extra help.		– Can generally apply rules to make decisions about arrest and detention; applies rules for safeguarding rights.		– Shows exceptional skill in applying rules for arrest and detention even in difficult or unusual situations.		
– Cannot effectively subdue, control, or restrain a prisoner without use of excessive force.		– Can generally subdue, control, and restrain a prisoner using accepted techniques and effective use of force; requires minimal help.		– Can effectively subdue, control, and restrain a prisoner without help and with controlled use of force to match the situation.		
– Does not understand or cannot apply effective techniques for safeguarding evidence and controlling a crime scene.		– Is generally effective in following required procedures in safeguarding evidence and controlling a crime scene.		– Is highly skilled in analyzing the situation and employing effective techniques in safeguarding evidence and controlling a crime scene.		

#### H. Safety Procedures

How well has the Soldier learned to follow safety procedures, being alert to possible dangerous or hazardous situations and taking steps to protect self, other Soldiers, and equipment?

1	2	3	4	5	6	7
– Is careless in safety awareness; needs special help and reminders.		– Follows safety instructions; adheres to safety warnings, briefings, and instructions.		– Is very alert to safety restrictions and instructions; reminds others of safety requirements.		
– Fails to recognize unsafe conditions or responds improperly.		– Recognizes and responds appropriately to unsafe conditions.		– Recognizes potential vehicle or safety problems that many Soldiers might overlook.		

## 63B TRAINING PERFORMANCE RATING SCALES

A. Learns Preventive Maintenance Checks and Services (PMCS)						
How well has the Soldier learned to perform scheduled maintenance tasks to keep vehicles operational?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>Does not use the manual for PMCS or does not correctly apply PMCS steps. Does not use or follow the LO (Lubrication Order).</li> <li>During PMCS, does not diagnose the need for, or properly replace parts.</li> <li>Neglects the LO when it was a part of the PMCS.</li> </ul>		<ul style="list-style-type: none"> <li>Uses the manual and LO for PMCS; generally applies PMCS steps with minimal coaching.</li> <li>Identifies the need for replacement parts; is able to replace most parts.</li> <li>As needed, refers to LO when checking fluid levels.</li> </ul>			<ul style="list-style-type: none"> <li>Always uses the manual and LO for PMCS; is very systematic and skilled in applying PMCS steps.</li> <li>Always correctly identifies the status of parts; never misdiagnoses wear or damage; quickly and correctly replaces parts.</li> <li>When needed and IAW (in accordance with) the LO, uses correct type and amount of lubricant when performing PMCS.</li> </ul>	

B. Learns to Troubleshoot Vehicle and Equipment Problems						
How well has the Soldier learned to inspect and test equipment and determine the causes of malfunctions?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>Does not follow troubleshooting guides or does not apply troubleshooting steps correctly.</li> <li>Cannot diagnose complicated maintenance problems; makes incorrect assumptions or stops before the problem is resolved.</li> </ul>		<ul style="list-style-type: none"> <li>Generally follows troubleshooting guides effectively; may need some help in applying some troubleshooting steps.</li> <li>Generally completes complicated maintenance diagnoses; may need help on some steps.</li> </ul>			<ul style="list-style-type: none"> <li>Follows troubleshooting guides quickly and without mistakes; is very skilled at completing troubleshooting steps.</li> <li>Fully completes complicated diagnoses using a step-by-step approach.</li> </ul>	

C. Learns to Repair Vehicles and Equipment						
How well has the Soldier learned to remove and replace components and to complete all necessary repairs, adjustments, and checks to make vehicles and other equipment operational?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Performs faulty or incomplete removal and replacement of parts; does not make necessary adjustments as part of completing repairs.</li> <li>– Shows poor understanding of effects of repairs on the system; fails to make or interpret system checks and tests.</li> </ul>		<ul style="list-style-type: none"> <li>– Generally performs most removal and replacement steps correctly; knows adjustment and checks requirements; may need some help on some procedures.</li> <li>– Understands the effects of repairs on most systems; performs checks and tests; may need some help on some vehicles or equipment.</li> </ul>		<ul style="list-style-type: none"> <li>– Removes and installs replacement parts completely and quickly; always correctly adjusts and checks parts as part of the repair process.</li> <li>– Has complete understanding of effects of repairs on all systems; accurately and completely interprets system checks and tests.</li> </ul>		

D. Learns to Use Technical References and Assistance						
How well has the Soldier learned to use resources and references in performing maintenance procedures?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Uses references poorly or incompletely; has problems applying written instructions, diagrams, and figures to task performance.</li> <li>– Often fails to seek help when needed or frequently seeks help on routine procedures.</li> </ul>		<ul style="list-style-type: none"> <li>– Understands and uses most references effectively; may need some additional help.</li> <li>– Usually recognizes when to seek help; normally can perform most expected tasks without help.</li> </ul>		<ul style="list-style-type: none"> <li>– Completely understands references and is skilled in looking up and interpreting written instructions, diagrams, and figures.</li> <li>– Has complete understanding of own mechanical capabilities and limitations. Always knows when to seek help and when not to.</li> </ul>		

E. Learns Safety Procedures						
How well has the Soldier learned to follow safety procedures, being alert to possible dangerous or hazardous situations and taking steps to protect self, other Soldiers, and equipment?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Is careless in safety awareness; needs special help and reminders.</li> <li>– Fails to recognize unsafe conditions or responds improperly.</li> </ul>		<ul style="list-style-type: none"> <li>– Follows safety instructions; adheres to safety warnings, briefings, and instructions.</li> <li>– Recognizes and responds appropriately to unsafe conditions.</li> </ul>		<ul style="list-style-type: none"> <li>– Is very alert to safety restrictions and instructions; reminds others of safety requirements.</li> <li>– Recognizes potential vehicle or safety problems that many Soldiers might overlook.</li> </ul>		



## 68W TRAINING PERFORMANCE RATING SCALES

A. Learns to Perform Procedures and Dispense Medications						
How well has the Soldier learned to perform skills such as administering an IV, changing bandages, administering medications, and so forth?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>Requires supervision to perform procedures; becomes tense and nervous while performing procedures.</li> <li>Unable to correctly apply procedures when obtaining blood samples, inserting IVs, or changing bandages, etc.</li> <li>Fails to follow the proper procedures for administering injections (emergency medications, morphine, antibiotics).</li> </ul>		<ul style="list-style-type: none"> <li>Occasionally requires supervision when performing procedures; usually remains calm when performing procedures.</li> <li>Applies proper procedures when obtaining blood samples, inserting IVs, or changing bandages, etc., but may not do so quickly.</li> <li>Usually follows the proper procedures to administer injections properly (emergency medications, morphine, antibiotics).</li> </ul>		<ul style="list-style-type: none"> <li>Performs procedures efficiently and without supervision; always remains calm while performing procedures.</li> <li>Quickly and skillfully applies procedures when obtaining blood samples, inserting IVs, or changing bandages, etc.</li> <li>Always follows the proper procedures to administer injections (emergency medications, morphine, antibiotics).</li> </ul>		

B. Learns to Initiate and Maintain Proper Patient Documentation						
How well has the Soldier learned to initiate and maintain proper patient documentation (e.g., DD Form 1380, SF600, SOAP [standard, objective, assessment and plan] format)?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>Inaccurately records injuries, treatments, or other information on DD Form 1380, SF600, or other forms; fails to record essential information in SOAP format.</li> <li>Thoughtlessly shares information that would be confidential during training scenarios with mock patients; may not recognize consequences of information disclosure.</li> </ul>		<ul style="list-style-type: none"> <li>Accurately records most injuries, treatments, and other information on DD Form 1380, SF600, or other forms; avoids common mistakes when recording information in SOAP format.</li> <li>Safeguards most information that would be confidential during training scenarios with mock patients; usually recognizes the consequences of information disclosure.</li> </ul>		<ul style="list-style-type: none"> <li>Accurately records all injuries, treatments, and other information on DD Form 1380, SF600, or other forms; always records information in correct SOAP format.</li> <li>Safeguards all information that would be confidential during training scenarios with mock patients; is highly sensitive to the consequences of information disclosure.</li> </ul>		

C. Learns to Provide Emergency Care						
How well has the Soldier learned to provide emergency care?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Freezes or gets confused in stressful/emergency situations; cannot follow directions from others.</li> <li>– Fails to correctly determine treatment priority; treats less severely injured patients first.</li> <li>– Provides improper treatment to patients, which may endanger their survival or safety.</li> <li>– Uses pressure dressings or tourniquets improperly, or fails to use them when needed; lacks knowledge of special life saving techniques and equipment.</li> </ul>		<ul style="list-style-type: none"> <li>– Usually stays calm in stressful/emergency situations; may need direction from others.</li> <li>– Correctly determines severity of injury or illness and usually requests assistance when necessary.</li> <li>– Provides sufficient treatment to ensure patients' comfort and safety.</li> <li>– Correctly uses pressure dressings or tourniquets; uses special life saving techniques and equipment in emergency situations.</li> </ul>			<ul style="list-style-type: none"> <li>– Takes control in stressful/emergency situations; knows what to do and gets started on tasks.</li> <li>– Quickly and accurately determines treatment priority; always requests assistance when necessary.</li> <li>– Efficiently provides treatment to patients which ensures their safety and improves their chances for survival.</li> <li>– Quickly and correctly uses pressure dressings and tourniquets; expertly uses special life saving techniques and equipment in emergency situations.</li> </ul>	

D. Learns to Triage Casualties						
How well has the Soldier learned to triage and categorize casualties?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Fails to triage properly; does not provide proper treatment during triage.</li> <li>– Does not separate expectant casualties from other casualties.</li> </ul>		<ul style="list-style-type: none"> <li>– Makes triage decisions accurately; provides essential treatment during triage.</li> <li>– Usually separates expectant casualties from other casualties.</li> </ul>			<ul style="list-style-type: none"> <li>– Makes triage decisions quickly and accurately; always provides all necessary life-saving treatment during triage.</li> <li>– Always separates expectant casualties from other casualties.</li> </ul>	

E. Learns to Categorize Patient Evacuation and Implement 9-Line MEDEVAC Requests						
How well has the Soldier learned to evacuate and implement 9-Line MEDEVAC requests?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Provides unclear or inaccurate information concerning the location and condition of injured personnel.</li> <li>– Loads or unloads the ambulance improperly; fails to secure patient to the litter or carries the litter improperly.</li> <li>– Fails to classify evacuation categories properly; fails to implement 9-Line MEDEVAC requests properly.</li> </ul>		<ul style="list-style-type: none"> <li>– Usually provides accurate details to locate and treat injured personnel.</li> <li>– Loads and unloads the ambulance in the proper order; adequately secures and carries the litter.</li> <li>– Makes evacuation categorization decisions accurately; accurately provides the most important information during 9-Line MEDEVAC request.</li> </ul>		<ul style="list-style-type: none"> <li>– Always provides clear, accurate details on the location and condition of injured personnel.</li> <li>– Always carefully loads and unloads the ambulance in the proper order; secures patients to the litter to avoid further injury.</li> <li>– Makes evacuation categorization decisions quickly and accurately; accurately provides all information included in 9-Line MEDEVAC requests.</li> </ul>		

F. Learns to Maintain Medical Aid Bag						
How well has the Soldier learned to keep medical aid bag properly stocked and stored?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Conducts inadequate inventories of medical aid bag; does not monitor what is on hand and what is needed.</li> <li>– Does not request medicine and supplies that are needed for medical aid bag.</li> <li>– Fails to inspect medications for expiration and spoilage; improperly loads and stores supplies/equipment.</li> </ul>		<ul style="list-style-type: none"> <li>– Conducts adequate inventories of medical aid bag when reminded to do so.</li> <li>– Requests most essential medicine and supplies that are needed for medical aid bag.</li> <li>– Usually inspects medications for expiration dates and spoilage; usually loads and stores supplies/equipment properly.</li> </ul>		<ul style="list-style-type: none"> <li>– Closely monitors use and amount of supplies in medical aid bag.</li> <li>– Requests all needed medicine and supplies for medical aid bag.</li> <li>– Always inspects medications and eliminates expired or spoiled medication, properly loads and stores supplies/equipment.</li> </ul>		

### G. Learns Safety Procedures

How well has the Soldier learned to follow safety procedures, being alert to possible dangerous or hazardous situations and taking steps to protect self, other Soldiers, and equipment?

1	2	3	4	5	6	7
<ul style="list-style-type: none"><li>– Is careless in safety awareness; needs special help and reminders.</li><li>– Fails to recognize unsafe conditions or responds improperly.</li></ul>		<ul style="list-style-type: none"><li>– Follows safety instructions; adheres to safety warnings, briefings, and instructions.</li><li>– Recognizes and responds appropriately to unsafe conditions.</li></ul>		<ul style="list-style-type: none"><li>– Is very alert to safety restrictions and instructions; reminds others of safety requirements.</li><li>– Recognizes potential vehicle or safety problems that many Soldiers might overlook.</li></ul>		

## 88M TRAINING PERFORMANCE RATING SCALES

A. Learns Driving Operations						
How well has the Soldier learned transportation vehicle operations, including driving under different road conditions, operating trailers, and performing PMCS (preventive maintenance checks and services)?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Ignores proper driving procedures (e.g., drives too fast, tailgates other vehicles); does not maintain vehicle control.</li> </ul>		<ul style="list-style-type: none"> <li>– Shows acceptable progress in vehicle operation and maintains vehicle control; is a careful and attentive driver.</li> </ul>		<ul style="list-style-type: none"> <li>– Always attentive to proper driving procedures; is very much at ease with vehicle operation; sets the example for vehicle operation that other drivers try to follow.</li> </ul>		
<ul style="list-style-type: none"> <li>– Does not follow proper procedures for attaching and operating vehicles with trailers/semi-trailers.</li> </ul>		<ul style="list-style-type: none"> <li>– Follows proper procedures in attaching and operating vehicles with trailers/semi-trailers.</li> </ul>		<ul style="list-style-type: none"> <li>– Attaches trailers/semi-trailers and operates vehicle skillfully and without errors.</li> </ul>		
<ul style="list-style-type: none"> <li>– Tends to pull incomplete or poor PMCS on vehicle; does not understand or follow PMCS guides.</li> </ul>		<ul style="list-style-type: none"> <li>– Follows PMCS procedures; pays attention to vehicle condition during all stages of operation.</li> </ul>		<ul style="list-style-type: none"> <li>– Performs PMCS completely and quickly; shows advanced understanding of the maintenance part of vehicle operation.</li> </ul>		

B. Learns to Transport Cargo and Personnel						
How well has the Soldier learned to load cargo, including placing, securing, and protecting cargo; and to load and unload personnel including, seating, protecting, transporting?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Places or secures loads improperly; shows lack of understanding of loading principles and requirements.</li> </ul>		<ul style="list-style-type: none"> <li>– Shows understanding and knowledge of cargo loading, bracing, and securing procedures.</li> </ul>		<ul style="list-style-type: none"> <li>– Shows highest level of knowledge and attention to detail in all aspects of loading and securing cargo.</li> </ul>		
<ul style="list-style-type: none"> <li>– Uses ratchet straps, chains, and binders improperly.</li> </ul>		<ul style="list-style-type: none"> <li>– Demonstrates proper use of ratchet straps, chains, and binders.</li> </ul>		<ul style="list-style-type: none"> <li>– Applies ratchet straps, chains, and binders quickly and without mistakes.</li> </ul>		
<ul style="list-style-type: none"> <li>– Does not show understanding of safely loading/unloading and transporting of troops.</li> </ul>		<ul style="list-style-type: none"> <li>– Demonstrates acceptable knowledge of safely loading/unloading and transporting of troops.</li> </ul>		<ul style="list-style-type: none"> <li>– Shows the highest level of knowledge in troop loading and transport procedures; is constantly alert to the safety considerations of troop transport.</li> </ul>		

C. Learns Convoy Operations						
How well has the Soldier learned convoy preparation, requirements of convoy control measures, convoy rules, and in-route instructions?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>– Does not understand or follow convoy preparation procedures. Does not perform correct actions at assembly areas, halts, and breaks.</li> <li>– Does not adequately control vehicle during convoy operations; often violates speed and interval requirements</li> <li>– Does not understand or follow strip maps; often misunderstands or does not follow route markers and directions.</li> <li>– Does not understand or follow convoy leaders' instructions and signals.</li> </ul>		<ul style="list-style-type: none"> <li>– Generally follows the instructions for convoy preparation; completes actions at assembly areas, halts, and breaks, as directed.</li> <li>– Meets requirements of vehicle control and operation in convoy; follows catch-up speed instructions and corrects interval problems as directed.</li> <li>– Meets requirements of reading strip maps, is alert and responsive to most route markers.</li> <li>– Understands and follows convoy leaders' signals.</li> </ul>			<ul style="list-style-type: none"> <li>– Fully prepares for convoy operations without need for additional instruction; completes all actions at assembly areas, halts, and breaks without direction.</li> <li>– Shows advanced skill in convoy operations; anticipates conditions affecting interval and speed and adjusts driving accordingly.</li> <li>– Reads strip maps quickly, with no difficulty; shows complete knowledge and understanding of all route markers.</li> <li>– Anticipates convoy leaders' directions and signals.</li> </ul>	

D. Learns Vehicle Operations in Tactical and Combat Situations and Under Difficult Conditions						
How well has the Soldier learned to operate vehicles in different terrains and conditions, including driving cross country and in inclement weather; driving at night; and driving in combat-like conditions?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>Shows lack of knowledge of battle drills and immediate action drills; responds incorrectly and slowly to threat incidents.</li> <li>Does not know or follow steps of preparing vehicle for combat operations; does not know or follow security procedures; lacks situational awareness.</li> <li>Does not adjust vehicle operations to changes in conditions; cannot operate effectively off road and during night operations.</li> </ul>		<ul style="list-style-type: none"> <li>Performs battle drills and immediate action drills; recognizes and responds as instructed to threat incidents.</li> <li>Follows instructions for preparing vehicle for combat operation; follows tactical security instruction; is generally situationally aware.</li> <li>Reacts to different road, weather, and light conditions; operates adequately off road and at night.</li> </ul>		<ul style="list-style-type: none"> <li>Thoroughly knows and performs tactical drills; reacts immediately and correctly to threat situations.</li> <li>Quickly and completely performs steps for preparing vehicle for combat operations; is very good at understanding and completing proper security measures; shows a high level of situational awareness.</li> <li>Accurately recognizes and effectively adjusts vehicle operation to road, weather and light conditions; demonstrates above average ability operating off road and at night.</li> </ul>		

E. Learns Safety Procedures						
How well has the Soldier learned to follow safety procedures, being alert to possible dangerous or hazardous situations and taking steps to protect self, other Soldiers, and equipment?						
1	2	3	4	5	6	7
<ul style="list-style-type: none"> <li>Is careless in safety awareness; needs special help and reminders.</li> <li>Fails to recognize unsafe conditions or responds improperly.</li> </ul>		<ul style="list-style-type: none"> <li>Follows safety instructions; adheres to safety warnings, briefings, and instructions.</li> <li>Recognizes and responds appropriately to unsafe conditions.</li> </ul>		<ul style="list-style-type: none"> <li>Is very alert to safety restrictions and instructions; reminds others of safety requirements.</li> <li>Recognizes potential vehicle or safety problems that many Soldiers might overlook.</li> </ul>		

## APPENDIX K

### MOS-SPECIFIC IN-UNIT PERFORMANCE RATING SCALES

#### 11B IN-UNIT PERFORMANCE RATING SCALES

A. Performs General Communications Functions/Prepares, Installs, and Operates Radios						
Performs general communications functions; prepares, installs, and operates radios.						
– Does not perform basic checks on communication equipment.		– Usually performs basic checks on communication equipment.			– Proficiently uses all aspects of the radio, in addition to performing basic checks on equipment.	
– Unable to operate radio; does not enter or exit nets properly.		– Able to operate a radio; usually enters and exits nets properly.			– Puts radio into operation quickly, even in dark; always enters and exits nets properly	
– Unable to operate keys/functions properly.		– Operates most keys/functions; operates in FH and SC mode.			– Operates all keys/functions properly; loads devices; never loses communication.	
1	2	3	4	5	6	7

B. Performs First Aid						
Evaluates injuries; administers the appropriate treatment.						
– Unable to apply basic first aid techniques (including treatment for shock, controlling bleeding, maintaining airway).		– Applies basic first aid techniques (including treatment for shock, controlling bleeding, maintaining airway) properly; may not do so quickly.			– Quickly performs the correct basic first aid techniques (including treatment for shock, controlling bleeding, maintaining airway).	
– Unable to perform advanced first aid interventions (does not know proper site for needle decompression, skips steps in preparing IVs).		– Able to perform advanced first aid interventions (administer IVs, needle chest decompression) with little supervision.			– Quickly and efficiently performs advanced first aid interventions (e.g., gets stick the first time) with no supervision.	
– Cannot call in a 9-line medevac request, even using a card.		– Calls in a 9-line medevac request using a card.			– Calls in a 9-line medevac request that includes all needed information without using a card.	
1	2	3	4	5	6	7



C. Operates and Maintains the Infantry Fighting Vehicle (IFV)						
Drives the assigned IFV and performs Preventative Maintenance Checks and Services (PMCS) on the hull and suspension to keep the vehicle operational; performs crew drills.						
<ul style="list-style-type: none"> <li>– Demonstrates no skill driving IFV.</li> <li>– Does not meet standard when performing crew drills.</li> <li>– Does not perform PMCS to standard; fails to conduct daily maintenance inspection.</li> </ul>		<ul style="list-style-type: none"> <li>– Demonstrates skill driving IFV.</li> <li>– Performs crew drills to standard, but needs practice.</li> <li>– Performs PMCS to standard, with supervision.</li> </ul>			<ul style="list-style-type: none"> <li>– Demonstrates very high level of skill driving IFV.</li> <li>– Consistently performs crew drills to standard.</li> <li>– Consistently performs PMCS to standard consistently with little or no supervision.</li> </ul>	
1	2	3	4	5	6	7

D. Operates and Maintains Aiming Devices						
Engages targets with aiming devices; zeroes sights; performs maintenance on aiming devices.						
<ul style="list-style-type: none"> <li>– Unable to engage targets with aiming devices.</li> <li>– Cannot zero sights accurately.</li> <li>– Does not use bore light equipment accurately.</li> <li>– Fails to perform basic equipment maintenance.</li> <li>– Unable to co-witness lasers and weapon sights.</li> </ul>		<ul style="list-style-type: none"> <li>– Able to engage targets with aiming devices with practice and coaching.</li> <li>– Zeroes sights accurately, but not quickly.</li> <li>– Uses bore light equipment, may require assistance.</li> <li>– Performs required maintenance on equipment when directed.</li> <li>– Co-witnesses lasers and weapon sights with supervision.</li> </ul>			<ul style="list-style-type: none"> <li>– Able to engage targets with all aiming devices.</li> <li>– Quickly zeroes sights accurately without assistance.</li> <li>– Expert at using bore light equipment.</li> <li>– Always maintains equipment to high degree.</li> <li>– Co-witnesses lasers and weapon sights with little or no supervision.</li> </ul>	
1	2	3	4	5	6	7

E. Operates and Maintains Weapons/Antitank Weapons/Hand Grenades/Mines/Pyrotechnics						
Uses and maintains personal weapons, anti-tank weapons, explosives, hand grenades, mines, and pyrotechnics.						
<ul style="list-style-type: none"> <li>– Cannot disassemble/assemble any assigned weapon; does not perform function check.</li> <li>– Does not perform misfire procedures to standard on either personal or anti-tank weapons.</li> <li>– Does not zero and qualify with personal weapons.</li> <li>– Does not employ grenades, mines and pyrotechnics appropriately.</li> <li>– Does not perform PMCS as specified in manuals.</li> <li>– Takes shortcuts rather than following safety procedures.</li> </ul>		<ul style="list-style-type: none"> <li>– Disassembles, assembles and performs function check on any assigned weapon; may need assistance, depending on the weapon.</li> <li>– Performs misfire procedures on both personal and/or anti-tank weapons to standard most of the time.</li> <li>– Zeroes and qualifies with personal weapons.</li> <li>– Employs grenades, mines, and pyrotechnics appropriately.</li> <li>– Executes PMCS as specified in manuals, but may need some assistance.</li> <li>– Generally follows safety procedures.</li> </ul>			<ul style="list-style-type: none"> <li>– Disassembles, assembles and performs function check on any assigned weapon.</li> <li>– Performs misfire procedures on personal and/or anti-tank weapons to standard; able to put weapon back into operation.</li> <li>– Zeroes and qualifies Expert with personal weapons.</li> <li>– Consistently employs grenades, mines, and pyrotechnics appropriately.</li> <li>– Executes PMCS as specified in manuals without assistance.</li> <li>– Always follows safety procedures.</li> </ul>	
1	2	3	4	5	6	7

F. Performs General Navigation Functions						
Uses navigational equipment (e.g., compass, map, GPS); locates objectives.						
<ul style="list-style-type: none"> <li>– Cannot identify terrain features on a map or give accurate grid coordinates.</li> <li>– Relies on others to locate objectives due to lack of skill in using navigational equipment.</li> <li>– Cannot navigate adequately at night or over unfamiliar terrain.</li> </ul>		<ul style="list-style-type: none"> <li>– Correctly identifies terrain features on a map and gives accurate grid coordinates.</li> <li>– Locates objectives in reasonable amount of time when provided navigation equipment.</li> <li>– Navigates adequately at night and over unfamiliar terrain.</li> </ul>			<ul style="list-style-type: none"> <li>– Excels at terrain association and gives precise grid coordinates.</li> <li>– Locates objectives without errors in less time than expected, even without navigation equipment.</li> <li>– Navigates effectively at night and over unfamiliar terrain.</li> </ul>	
1	2	3	4	5	6	7

G. Performs Tactical Operations						
Maintains noise and light discipline; prepares fighting positions; performs urban operations.						
<ul style="list-style-type: none"> <li>– Violates noise and light discipline; fails to use hand and arm signals to communicate or uses them incorrectly.</li> <li>– Fails to construct fighting position to standard; fails to camouflage positions correctly.</li> <li>– Unable to select adequate covered position during movement.</li> <li>– Operates poorly in urban conditions; is often out of position or fails to provide cover.</li> </ul>		<ul style="list-style-type: none"> <li>– Maintains noise and light discipline; uses most basic hand and arm signals adequately to communicate.</li> <li>– Constructs adequate fighting position in reasonable amount of time with proper camouflage.</li> <li>– Can select adequate covered position during movement.</li> <li>– Operates adequately in urban conditions; is usually correctly positioned and provides fire support as directed.</li> </ul>			<ul style="list-style-type: none"> <li>– Consistently maintains noise and light discipline; uses appropriate hand and arm signals to communicate effectively.</li> <li>– Prepares fighting position quickly, without supervision, even without proper tools; uses camouflage very effectively.</li> <li>– Selects best covered position during movement.</li> <li>– Operates proficiently in urban conditions; anticipates positions and fire support in reaction to the situation.</li> </ul>	
1	2	3	4	5	6	7

H. Operates a Checkpoint						
Recognizes potential threats; adheres to the rules of engagement (ROE); searches vehicles; controls traffic; interacts with civilians.						
<ul style="list-style-type: none"> <li>– Fails to adhere to ROE and/or recognize potential threats (e.g., IEDs [improvised explosive devices], weapons).</li> <li>– Does not properly follow procedures for processing detainees or interacting with civilians.</li> <li>– Searches vehicles without attention to detail; misses potential threats.</li> <li>– Fails to properly direct or challenge vehicles and personnel at traffic control points/check points.</li> </ul>		<ul style="list-style-type: none"> <li>– Adheres to ROE and recognizes potential threats (e.g., IEDs, weapons).</li> <li>– Generally follows proper procedures for processing detainees; reacts adequately in situations involving civilians.</li> <li>– Properly searches vehicles that pose potential threats.</li> <li>– Halts and challenges approaching vehicles and personnel at traffic control points/check points in simple situations.</li> </ul>			<ul style="list-style-type: none"> <li>– Consistently adheres to ROE and quickly recognizes potential threats (e.g., IEDs, weapons); additionally ensures that other Soldiers enforce ROE.</li> <li>– Demonstrates exceptional skill in processing detainees and dealing with civilians; enforces detainee/civilian procedures in other Soldiers.</li> <li>– Methodically and thoroughly searches vehicles identified as potential threats.</li> <li>– Authoritatively and effectively directs traffic, halts and challenges vehicles and personnel at traffic control points/check points, even during periods of heavy traffic.</li> </ul>	
1	2	3	4	5	6	7

I. Operates and Maintains Night Vision Devices						
Operates and maintains night vision devices.						
<ul style="list-style-type: none"> <li>– Cannot zero the sights on night vision devices accurately.</li> <li>– Cannot use accessories to standard.</li> <li>– Fails to make proper adjustments to diopter and/or the range/zoom magnification.</li> <li>– Fails night weapons qualification.</li> <li>– Fails to perform even basic equipment maintenance.</li> </ul>		<ul style="list-style-type: none"> <li>– Zeroes sights on night vision devices accurately, but may not do so quickly.</li> <li>– Uses some, but not all accessories to standard.</li> <li>– Adequately adjusts the diopter and the range/zoom magnification.</li> <li>– Qualifies in night firing.</li> <li>– Performs all scheduled maintenance on equipment.</li> </ul>			<ul style="list-style-type: none"> <li>– Quickly zeroes the sights on night vision devices accurately.</li> <li>– Able to use all accessories to standard.</li> <li>– Accurately and quickly adjusts the diopter and the range/zoom magnification.</li> <li>– Scores Expert in night qualification.</li> <li>– Performs extensive maintenance on equipment.</li> </ul>	
1	2	3	4	5	6	7

## 19K IN-UNIT PERFORMANCE RATING SCALES

A. Performs General Tank Crew Operations						
Performs tank crew operations; follows commands and Standard Operating Procedures (SOPs); follows evacuation and NBC procedures.						
– Does not apply SOPs, takes unnecessary shortcuts when correcting deficiencies, or misses defects.		– Usually applies SOPs appropriately to correct defects or deficiencies.			– Always applies SOPs to correct defects or deficiencies before problems arise.	
– Mishandles injured crewmen or works slowly during evacuation procedures.		– Follows evacuation procedures correctly with some supervision.			– Quickly, correctly, and safely evacuates injured crewmen from a tank.	
– Fails to follow proper procedure to prepare a tank for NBC operations.		– Usually follows proper procedure to prepare a tank for NBC operations.			– Always follows proper procedure to prepare a tank for NBC operations, even under difficult conditions.	
– Fails to follow proper SOPs for receiving and relaying messages and setting up radios or Automated Net Control Device (ANCD).		– Typically sets up radio on correct frequency and follows transmission SOPs; uses ANCD properly; may need some assistance or direction.			– Operates radios or ANCD without supervision; acknowledges radio transmissions and quickly takes appropriate action.	
1	2	3	4	5	6	7

B. Performs Tank-Mounted Mine Clearing Equipment Services and Functions						
Performs tank-mounted mine clearing equipment services and functions; follows SOPs for preparing a tank for a minefield and in maintaining mine clearing equipment.						
– Fails to thoroughly prepare tank for minefield clearing; does not follow proper procedures in mounting and dismounting mine clearing equipment.		– Prepares tank for minefield operations with supervision; properly mounts and dismounts mine clearing equipment.			– Expertly prepares tanks for minefield operations without supervision in minimal time; skillfully mounts and dismounts mine clearing equipment.	
– Often fails to service and maintain mine clearing equipment in accordance with SOP and Technical Manuals (TMs).		– Typically follows SOPs and TMs for servicing and maintaining mine clearing equipment; may overlook minor deficiencies.			– Always follows SOPs, orders, and TMs for servicing and maintaining mine clearing equipment.	
1	2	3	4	5	6	7

C. Operates and Maintains Tank-Mounted Machine Guns						
Operates and maintains tank-mounted machine guns; follows procedures when performing these tasks; engages targets.						
– Neglects cleaning and maintenance of crew-served weapons.		– Usually keeps crew-served weapons cleaned and maintained.			– Thoroughly inspects, maintains, and cleans crew-served weapons.	
– Does not follow correct procedures when engaging targets.		– Almost always follows correct procedures when engaging targets.			– Expertly identifies and engages targets.	
– Does not perform correct immediate action procedures within 10 seconds of a stoppage.		– Usually applies immediate action within 10 seconds of a stoppage.			– Always applies immediate action within 10 seconds of a stoppage.	
1	2	3	4	5	6	7

D. Performs Tank Driver Functions and Operations						
Performs tank driver functions and operations correctly; follows TMs and SOPs and instructions from tank commander; applies correct driving techniques for terrain and conditions.						
– Often deviates from commander's instructions, TMs, and SOPs.		– Usually follows tank commander's instructions, TMs, and SOPs.			– Strictly adheres to tank commander's instructions, TMs, and SOPs.	
– Fails to follow proper procedures when operating tanks.		– Generally uses correct procedures when operating tanks with some supervision.			– Properly operates tank and uses correct driving techniques with no supervision required.	
– Fails to apply correct driving techniques for terrain and conditions, does not use ground guides or follow instructions.		– Applies correct driving techniques for terrain and conditions with some help from tank commander; follows ground guide's instructions.			– Consistently applies correct driving techniques, choosing best travel route and battle positions; correctly negotiates all obstacles without instruction.	
1	2	3	4	5	6	7

E. Performs Tank Maintenance Functions						
Performs tank maintenance functions; notices minor and major defects; follows SOPs; completes maintenance and order forms; performs tank recovery.						
<ul style="list-style-type: none"> <li>– Does not adhere to SOPs, orders, safety procedures, or TMs when performing PMCS.</li> <li>– May fail to notice or correct serious defects.</li> <li>– Turns in order and maintenance forms that are incomplete or incorrect.</li> <li>– May fail to survey area or choose incorrect method to recover tank; uses recovery equipment improperly.</li> </ul>		<ul style="list-style-type: none"> <li>– Generally follows SOPs, orders, safety procedures, and TMs when performing PMCS.</li> <li>– May overlook minor defects; detects and takes action on serious problems; installs parts and makes small repairs correctly when supervised.</li> <li>– Completes maintenance and order forms correctly; forms may need review before submitting.</li> <li>– May need help to determine the best method for recovery or to correctly place hook and cables in recovering tank.</li> </ul>			<ul style="list-style-type: none"> <li>– Carefully follows all SOPs, orders, safety procedures, and TMs when performing PMCS.</li> <li>– Immediately corrects any minor deficiencies; installs parts and makes repairs without supervision.</li> <li>– Always fills out order forms and other maintenance documents correctly; no review needed before submitting.</li> <li>– Determines best method for tank recovery; prepares tank for towing even during adverse conditions; always uses proper equipment for recovery.</li> </ul>	
1	2	3	4	5	6	7

F. Performs Gunnery Operations						
Performs gunnery operations; follows and understands TMs, SOPs and orders; catches problems and defects; passes the TCGST.						
<ul style="list-style-type: none"> <li>– Does not adhere to SOP, orders, or TMs when performing maintenance on ammunition and main gun assembly; may fail to notice and correct serious defects.</li> <li>– Does not follow correct procedures when operating controls resulting in missed targets, mission delays, etc.</li> <li>– Misinterprets or fails to promptly follow fire commands; does not make correct announcements.</li> <li>– Makes errors when completing range/sketch cards.</li> <li>– Fails the TCGST.</li> </ul>		<ul style="list-style-type: none"> <li>– Generally follows SOP, orders, and TMs when performing maintenance on ammunition and main gun assembly; takes action on serious problems.</li> <li>– Almost always follows correct procedures when operating controls; may need supervision to execute complex procedures.</li> <li>– Generally responds promptly and correctly to fire commands; usually makes proper announcements.</li> <li>– Prepares an error-free range/sketch card, but not quickly.</li> <li>– Eventually passes the TCGST.</li> </ul>		<ul style="list-style-type: none"> <li>– Always follows SOP, Orders, and TMs when performing maintenance on ammunition and main gun assembly; takes action whenever needed.</li> <li>– Is highly effective at operating controls, even under difficult conditions.</li> <li>– Responds promptly and correctly to fire commands; always makes proper announcements.</li> <li>– Accurately prepares range/sketch cards in minimal time.</li> <li>– Passes the TCGST on first try.</li> </ul>		
1	2	3	4	5	6	7



G. Performs Security Operations						
Performs calls for fire; establishes and maintains area security and discipline; constructs camouflaged fighting positions.						
<ul style="list-style-type: none"> <li>– Gives incorrect information when calling for fire, or does so at the wrong time.</li> <li>– Does not establish listening/observation posts that have sufficient cover and concealment, communication, and equipment.</li> <li>– Often risks enemy detection; violates noise and light discipline; fails to use hand and arm signals correctly to communicate.</li> <li>– Fails to construct fighting positions quickly; fails to camouflage positions correctly.</li> </ul>		<ul style="list-style-type: none"> <li>– Knows when and how to call for fire in most situations.</li> <li>– Establishes listening/observation posts that usually have sufficient cover and concealment, communication, and equipment.</li> <li>– Usually avoids enemy detection; maintains noise and light discipline; uses basic hand and arm signals adequately to communicate.</li> <li>– Constructs fighting positions in reasonable amount of time with some supervision; ensures positions are camouflaged correctly.</li> </ul>			<ul style="list-style-type: none"> <li>– Consistently and accurately calls for fire whenever needed.</li> <li>– Establishes listening/observation posts that always have sufficient cover and concealment, communication, and equipment.</li> <li>– Always avoids enemy detection; maintains noise and light discipline; uses appropriate hand and arm signals to communicate.</li> <li>– Prepares fighting positions quickly and correctly without supervision; uses camouflage very effectively.</li> </ul>	
1	2	3	4	5	6	7

### 31B IN-UNIT PERFORMANCE RATING SCALES

A. Weapons						
Uses and maintains individual weapons and machine guns.						
– Is careless around weapons; needs monitoring and observation.		– Follows weapon safety procedures with minimum reminders and supervision.		– Is extremely safety conscious around weapons; reminds others of safety procedures.		
– Has difficulty in disassembling, assembling, and performing function checks on M9, MK19, and M249; needs extra help.		– Disassembles, assembles, and performs function checks on M9, MK19, and M249; may require help on some weapons.		– Disassembles, assembles, and performs function checks on M9, MK19 and M249 without any help.		
– Requires more than 2 refires to qualify with M9.		– Qualifies Marksman with M9 in 2 or fewer attempts.		– Qualifies Sharpshooter or Expert with M9.		
1	2	3	4	5	6	7

B. Interpersonal Communications Skills						
Communicates and interacts effectively with individuals in indigenous population or those who are upset, angry, or potentially violent.						
– Is hesitant to communicate with people of other backgrounds or with cultural differences.		– Communicates with those from different backgrounds, but may be uneasy with some cultures.		– Communicates well with others, regardless of background.		
– Has difficulty remaining calm even when dealing with cooperative individuals (e.g., may use abusive or profane language when dealing with prisoners and the general public); is rarely or never able to calm individuals who are hostile and upset.		– Generally remains calm and in control when dealing with angry or abusive individuals; attempts to calm hostile persons (e.g., prisoners) and comfort victims.		– Remains calm, even when working in life-threatening situations (e.g., enemy attack, hostage situation); is able to calm even very hostile or disturbed people.		
– Fails to separate individuals who are involved in a dispute; may choose sides and become personally involved; often threatens to use force to stop a disturbance.		– Separates individuals involved in disputes; listens calmly to both sides without showing favoritism; often recommends an effective solution; rarely threatens to use force to stop disturbance.		– Disperses even large groups involved in disputes; is able to calm most disputes by suggesting solutions; never threatens to use force to stop a disturbance.		
1	2	3	4	5	6	7

<p>C. Combat Techniques</p> <p>Detects explosive hazards (e.g., improvised explosive devices [IEDs]), moves as part of a fire team, and reacts to indirect fire while mounted.</p>						
<ul style="list-style-type: none"> <li>– Recognizes few indicators of explosive hazards and/or fails to notify supervisors.</li> <li>– Fails to assume correct position when dismounted; needs a lot of guidance as formation changes.</li> <li>– Does not react appropriately while under indirect fire; fails to analyze or report situation; unsure of how to continue mission.</li> </ul>		<ul style="list-style-type: none"> <li>– Recognizes most indicators of explosive hazards and notifies supervisors accordingly.</li> <li>– Generally assumes correct position while dismounted, even as formation changes.</li> <li>– Reacts appropriately while under indirect fire; reports situation; continues mission with some guidance.</li> </ul>			<ul style="list-style-type: none"> <li>– Recognizes all indicators of explosive hazards and immediately notifies supervisors.</li> <li>– Always assumes correct position while dismounted, even as formation changes.</li> <li>– Reacts quickly and confidently while under indirect fire; efficiently analyzes and reports situation; continues mission without help.</li> </ul>	
1	2	3	4	5	6	7

<p>D. Area Security</p> <p>Functions as a member of a scout, lead, or trail team while providing security for a convoy in a tactical environment.</p>						
<ul style="list-style-type: none"> <li>– Demonstrates poor execution of team position assignments from the squad leader.</li> <li>– Is unable, without direction, to maintain an acceptable level of situational awareness during convoy security operations.</li> <li>– Fails to recognize threats to the convoy; does not take action to avoid them.</li> </ul>		<ul style="list-style-type: none"> <li>– Demonstrates adequate execution of team position assignments from the squad leader.</li> <li>– Is able to maintain a sufficient level of situational awareness during convoy security operations.</li> <li>– Recognizes most threats to the convoy and takes appropriate action to avoid them.</li> </ul>			<ul style="list-style-type: none"> <li>– Demonstrates exceptional execution of team position assignments from the squad leader.</li> <li>– Is able to maintain a high level of situational awareness during convoy security operations.</li> <li>– Recognizes all threats to the convoy and takes immediate action to avoid them.</li> </ul>	
1	2	3	4	5	6	7

E. Detainee Operations						
Handles and transports detainees; inspects and guards detainees at Detainment/Corrections facilities.						
– Shows tendency to mistreat detainees; does not follow standards of conduct.		– Follows the standards of conduct in handling detainees.		– Enforces standards of conduct and leads by example when handling detainees.		
– Does not know or understand rules on use of force (RUF); fails to follow rules of engagement (ROE) in detainee situations during tactical operations.		– Adequately knows and applies ROE/RUF in detainee situations during tactical operations.		– Shows complete understanding of the steps in RUF; fully complies with ROE in tactical operations and enforces ROE with other Soldiers in all detainee situations.		
– Shows a lack of sensitivity to cultural factors and how they impact the mission.		– Understands how cultural factors impact the mission.		– Shows in-depth knowledge of cultural factors and how they impact the mission.		
1	2	3	4	5	6	7

F. Maneuver and Mobility Support Operation (MMSO)						
Operates as a team member at defiles, holding areas, traffic control points, dismount points, and roadblocks.						
– Shows little understanding of team leader instructions; needs constant reminding.		– Shows basic understanding of team leader instructions; needs little reminding.		– Shows exceptional understanding of team leader instructions; needs no reminding.		
– Fails to adhere to ROE and/or recognize potential threats (e.g., improvised explosive devices [IEDs], weapons).		– Adheres to ROE and recognizes potential threats (e.g., IEDs, weapons).		– Consistently adheres to ROE and quickly recognizes potential threats (e.g., IEDs, weapons); ensures that other Soldiers enforce ROE.		
– Does not properly follow procedures for processing detainees or interacting with civilians.		– Generally follows proper procedures for processing detainees; reacts adequately in situations involving civilians.		– Demonstrates exceptional skill in processing detainees and dealing with civilians; enforces detainee/civilian procedures in other Soldiers.		
– Fails to properly halt or challenge vehicles and personnel at traffic control points/check points.		– Halts and challenges approaching vehicles and personnel at traffic control points/check points in simple situations.		– Authoritatively and effectively halts and challenges vehicles and personnel at traffic control points/check points, even during periods of heavy traffic.		
1	2	3	4	5	6	7

G. Vehicle Operations						
Maintains and operates wheeled vehicles in tactical and non-tactical conditions.						
<ul style="list-style-type: none"> <li>Does not properly follow the technical manual (TM) or understand preventative maintenance checks and services (PMCS) requirements for the vehicle; fails to identify or react to maintenance problems.</li> <li>Is a poor or uncertain driver; does not anticipate changes in terrain or road conditions and places vehicle or crew at risk.</li> <li>Shows poor situational awareness while operating wheeled vehicle in threat environment; is confused by or fails to react to instructions from command vehicles.</li> </ul>		<ul style="list-style-type: none"> <li>Follows TM and PMCS requirements; identifies and acts on most maintenance problems and requirements.</li> <li>Drives adequately; usually anticipates changes and avoids risk conditions; is a careful driver.</li> <li>Shows good situational awareness while operating wheeled vehicle in threat environment; reacts well to instructions from command vehicles.</li> </ul>			<ul style="list-style-type: none"> <li>Carefully and accurately follows TM and PMCS requirements; identifies and acts on all maintenance problems.</li> <li>Shows exceptional driving skill; expects and reacts very well to unusual conditions; is a confident and careful driver.</li> <li>Shows exceptional situational awareness while operating wheeled vehicle in threat environment; reacts quickly to instructions from command vehicles.</li> </ul>	
1	2	3	4	5	6	7

H. Law Enforcement						
Follows the requirements of crime prevention and detection, apprehension, and the safeguarding of evidence.						
<ul style="list-style-type: none"> <li>Does not understand or cannot apply the principles of apprehension and arrest without extra help.</li> <li>Cannot effectively subdue, control, or restrain a prisoner without use of excessive force.</li> <li>Does not understand or cannot apply effective techniques for safeguarding evidence and controlling a crime scene.</li> </ul>		<ul style="list-style-type: none"> <li>Can generally apply rules to make decisions about arrest and detention; applies rules for safeguarding rights.</li> <li>Can generally subdue, control, and restrain a prisoner using accepted techniques and effective use of force; requires minimal help.</li> <li>Is generally effective in following required procedures in safeguarding evidence and controlling a crime scene.</li> </ul>			<ul style="list-style-type: none"> <li>Shows exceptional skill in applying rules for arrest and detention even in difficult or unusual situations.</li> <li>Can effectively subdue, control, and restrain a prisoner without help and with controlled use of force to match the situation.</li> <li>Is highly skilled in analyzing the situation and employing effective techniques in safeguarding evidence and controlling a crime scene.</li> </ul>	
1	2	3	4	5	6	7

### 63B IN-UNIT PERFORMANCE RATING SCALES

<p>A. Performs Preventive Maintenance Checks and Services</p> <p>Carries out routine maintenance tasks (replacing parts, lubricating vehicles) on schedule to keep vehicles operational.</p>						
<ul style="list-style-type: none"> <li>– During PMCS, does not properly replace needed parts.</li> <li>– Overlooks the Lubrication Order (LO) when it was a part of the PMCS.</li> <li>– Gets behind schedule or leaves job without completing it.</li> </ul>		<ul style="list-style-type: none"> <li>– Replaces bad parts with the appropriate ones during PMCS.</li> <li>– Usually refers to the LO when checking fluid levels.</li> <li>– Completes services on time and in accordance with the service schedule.</li> </ul>			<ul style="list-style-type: none"> <li>– Makes thorough checks during PMCS to replace any worn parts; replaces them quickly and without problems.</li> <li>– When needed and in accordance with the LO, uses correct type and amount of lubricant when performing PMCS.</li> <li>– Often completes service ahead of schedule, always in accordance with the service schedule.</li> </ul>	
1	2	3	4	5	6	7

<p>B. Troubleshoots Vehicle and Equipment Problems</p> <p>Troubleshoots and tests equipment malfunctions and determines the causes of equipment malfunctions.</p>						
<ul style="list-style-type: none"> <li>– Overlooks or fails to check obvious sources of problems.</li> <li>– Does not follow troubleshooting procedures, so may incorrectly identify source of problem; makes repairs that only solve part of the problem.</li> </ul>		<ul style="list-style-type: none"> <li>– Inspects and tests equipment and vehicles to find problems; able to diagnose common problems.</li> <li>– Follows troubleshooting procedures; correctly determines the cause of the malfunction(s).</li> </ul>			<ul style="list-style-type: none"> <li>– Inspects and tests equipment and vehicles thoroughly and considers all available symptoms and information to diagnose the underlying problem.</li> <li>– Troubleshoots logically, systematically eliminating potential sources of problems, often finding malfunctions that other first-term mechanics may have missed.</li> </ul>	
1	2	3	4	5	6	7

<p>C. Repairs Vehicles and Equipment</p> <p>Corrects malfunctions to make vehicles operational; tests vehicles after servicing.</p>						
<ul style="list-style-type: none"> <li>– Installs repair parts incorrectly and without making appropriate adjustment; fails to install all parts of a system after they have been removed.</li> <li>– Does not test/operate equipment after repairing or servicing it; reports that the work has been completed before testing has been done.</li> </ul>		<ul style="list-style-type: none"> <li>– Installs and adjusts repair parts correctly and verifies that all parts have been replaced after removal.</li> <li>– Tests/operates equipment under commonly encountered conditions after repairing or servicing it.</li> </ul>			<ul style="list-style-type: none"> <li>– Installs and adjusts repair parts correctly and efficiently; carefully checks that all parts have been replaced properly by testing/operating the vehicles.</li> <li>– Tests/operates equipment under even unusual conditions after repairing or servicing it.</li> </ul>	
1	2	3	4	5	6	7

<p>D. Uses Tools and Test Equipment</p> <p>Selects, sets up, maintains, and accounts for tools and test equipment.</p>						
<ul style="list-style-type: none"> <li>– Loses tools and test equipment or allows them to become dirty or unserviceable.</li> <li>– Selects the wrong tools and test equipment.</li> <li>– Does not use test equipment correctly; may not notice that calibration is out of date.</li> </ul>		<ul style="list-style-type: none"> <li>– Keeps tools and test equipment clean, serviceable, and accounted for.</li> <li>– Usually selects the most appropriate tools and test equipment for the task.</li> <li>– Uses test equipment correctly; finds the cause of most malfunctions; occasionally checks to ensure calibrations are up to date.</li> </ul>			<ul style="list-style-type: none"> <li>– Cleans tools and test equipment immediately after use; maintains tools in good condition at all times; keeps tools accounted for and secure.</li> <li>– Consistently selects the most appropriate tools and test equipment for the task.</li> <li>– Uses test equipment correctly and finds the cause of the malfunction(s); always ensures equipment calibrations are up to date.</li> </ul>	
1	2	3	4	5	6	7

<p>E. Uses Technical References</p> <p>Acquires and uses the necessary materials, and technical documents (e.g., technical manuals [TMs], LOs) when performing tasks.</p>						
– Fails to consult TMs to determine task requirements.	– Uses TMs to determine task requirements.	– Uses TMs quickly and accurately to determine task requirements.				
– Uses the wrong reference(s) to perform tasks; obtains incorrect stock numbers.	– Selects reference(s) for performing tasks and obtaining stock numbers.	– Uses reference(s) quickly and accurately when performing tasks and obtaining stock numbers.				
1	2	3	4	5	6	7

<p>F. Operates and Self-Recovers Vehicles Safely</p> <p>Maintains, operates, and recovers vehicles; secures parked vehicles.</p>						
– Does not perform PMCS before, during, and after vehicle operation.	– Usually performs PMCS before, during, and after operating vehicles.	– Consistently performs PMCS before, during, and after vehicle operation in accordance with reference(s).				
– Drives too fast for road and vehicle conditions; damages vehicles by incorrectly operating them.	– Buckles up and drives the speed limit; operates vehicles correctly.	– Drives defensively and cautiously; operates vehicles correctly and safely.				
– Parks vehicles improperly, allowing them to roll.	– Parks vehicles properly, ensuring that they do not roll.	– Takes precautions to ensure that there is no possibility of a parked vehicle rolling.				
– Freezes when a vehicle becomes disabled; does not know what to do.	– Uses available equipment for self-recovery of disabled vehicles.	– Improvises safe self-recovery of disabled vehicles, even in difficult conditions.				
1	2	3	4	5	6	7



<p>G. Works Safely</p> <p>Follows safety precautions and uses appropriate special equipment and protective clothing.</p>						
<ul style="list-style-type: none"> <li>– Does not adhere to unit safety Standard Operating Procedures (SOP) when performing tasks.</li> <li>– Does not use protective clothing and special equipment when working under hazardous conditions.</li> </ul>		<ul style="list-style-type: none"> <li>– Follows unit safety SOP when performing tasks.</li> <li>– Usually uses appropriate protective clothing and special equipment when working under hazardous conditions.</li> </ul>		<ul style="list-style-type: none"> <li>– Follows unit safety SOP to avoid accidents and reminds other to do so.</li> <li>– Avoids personal injury and equipment damage by always using protective clothing and special equipment.</li> </ul>		
1	2	3	4	5	6	7

## 68W IN-UNIT PERFORMANCE RATING SCALES

<b>A. Provides Routine and Ongoing Patient Care</b> Treats non-emergency injuries or illnesses, monitors hospitalized patients, and assists the physician as required.						
<ul style="list-style-type: none"> <li>Requires supervision to provide routine patient care; becomes tense and nervous while treating patients.</li> <li>Only monitors hospitalized patient's condition periodically.</li> <li>May cause further injury to patients when obtaining blood samples, inserting IVs, or changing bandages, etc; fails to follow proper procedures to prepare patient for minor surgery.</li> </ul>		<ul style="list-style-type: none"> <li>Provides adequate routine patient care, occasionally requiring supervision; usually remains calm while treating patients.</li> <li>Regularly monitors hospitalized patients' condition.</li> <li>Usually follows proper procedures to obtain blood samples, insert IVs, change bandages, etc.; follows proper procedures to prepare patient for minor surgery and sometimes assists the physician in minor surgery.</li> </ul>			<ul style="list-style-type: none"> <li>Efficiently and without supervision provides routine patient care; always maintains professional calm while treating patients.</li> <li>Closely monitors hospitalized patients' condition and notifies physician of changes.</li> <li>Always follows proper procedures to take blood samples, insert IVs, or change bandages, etc.; follows proper procedures to prepare patient for surgery and often assists the physician in minor surgery.</li> </ul>	
1	2	3	4	5	6	7

<b>B. Dispenses Medications</b> Determines or identifies the correct non-prescription medication and administers medications as instructed by a physician.						
<ul style="list-style-type: none"> <li>Dispenses medications without first obtaining the proper authorization; fails to verify that patients receive the proper medication and dosage; fails to follow the five "rights" (right patient, right dose, etc.).</li> <li>Fails to follow the proper procedures for administering injections; misinforms outgoing patients about the correct use or dosage of medications.</li> </ul>		<ul style="list-style-type: none"> <li>Usually obtains authorization before dispensing medications; checks and rechecks the prescription and medication labels to ensure that the proper medication and dosage are administered; generally follows the five "rights" (right patient, right dose, etc.).</li> <li>Usually follows the procedures to administer injections properly; informs discharged patients about the frequency and dosage of prescribed medications.</li> </ul>			<ul style="list-style-type: none"> <li>Always ensures that only authorized medications are dispensed; checks the label at least 3 times to ensure that the patient receives the proper medication and dosage; consistently follows the five "rights" (right patient, right dose, etc.).</li> <li>Always follows the proper procedures to administer injections and explains procedures to patient beforehand; always explains the correct procedure for taking prescribed medications.</li> </ul>	
1	2	3	4	5	6	7

<p>C. Keeps Medical Records and Proper Documentation</p> <p>Completes and stores patients' medical history, current medication, treatment or other forms and ensures that all information is accurate and up-to-date.</p>						
<ul style="list-style-type: none"> <li>– May fail to inform patients of future appointments; fails to maintain proper records of patient location or to provide patients with the required forms; fails to complete SOAP (subjective, objective, assessment, and plan) notes.</li> <li>– Inaccurately records patients' vital signs and medical history; misidentifies patient specimen and cultures; may often forget to record medication given to patients; fails to include documentation when transferring patients.</li> <li>– Discloses confidential information; may not recognize consequences of information disclosure.</li> </ul>		<ul style="list-style-type: none"> <li>– Informs patients when checkups or immunizations should be scheduled; usually logs patients in and out at the appropriate times and provides them with the needed forms; usually completes SOAP notes accurately and properly.</li> <li>– Properly records patients' medical history and vital signs; labels patient specimen and cultures; immediately records medication given to patients; ensures all documentation is included when transferring patients.</li> <li>– Maintains confidential information.</li> </ul>		<ul style="list-style-type: none"> <li>– Keeps records of patients needing check-ups and immunizations, and contacts them to schedule appointments; maintains accurate records of patient location at all times; ensures that all forms are completed; always completes SOAP notes accurately and properly.</li> <li>– Accurately records patient vital signs and obtains a complete medical history; accurately labels specimens and cultures immediately after samples are taken; records medication after it is administered; always ensures that all documentation is included when transferring patients.</li> <li>– Is extremely careful in maintaining confidential patient information; never shares confidential information.</li> </ul>		
1	2	3	4	5	6	7

D. Responds to Emergency Situations Responds to life-threatening situations at accident sites, in the field, or in emergency rooms (performs triage, determines and applies treatment).						
<ul style="list-style-type: none"> <li>– Fails to take action, gets confused, or overreacts in emergency situations.</li> <li>– Fails to correctly determine treatment priority (fails to triage correctly); does not request assistance when necessary; provides treatment to patients which may endanger their survival or safety.</li> <li>– Applies emergency trauma bandages or tourniquets improperly or fails to use them when needed; lacks knowledge of special life saving techniques and equipment.</li> </ul>		<ul style="list-style-type: none"> <li>– Usually stays calm in emergency situations.</li> <li>– Correctly determines severity of injury or illness (triages correctly) and usually requests assistance when necessary; provides sufficient treatment to ensure patients' comfort and safety.</li> <li>– Usually correctly determines when to use emergency trauma bandages or tourniquets; adequately applies/uses special techniques and equipment in emergency situations.</li> </ul>			<ul style="list-style-type: none"> <li>– Remains calm in emergency situations; takes control; knows what to do and gets started on tasks.</li> <li>– Quickly and accurately determines treatment priority (triages correctly); always requests assistance when required; efficiently provides treatment to patients that ensures their safety and enhances their chances for survival.</li> <li>– Always correctly determines when to apply emergency trauma bandages and tourniquets; expertly applies/uses special techniques and equipment in emergency situations.</li> </ul>	
1	2	3	4	5	6	7

<p>E. Arranges for Transportation or Transports Injured Personnel</p> <p>Arranges for safe and proper transportation of injured personnel, secures patients to litter, and performs ongoing assessment during patient transportation.</p>						
<ul style="list-style-type: none"> <li>– Provides unclear or inaccurate information concerning the location of injured personnel; fails to locate injured personnel for transport in a timely fashion; fails to make MEDEVAC requests when appropriate or makes request improperly.</li> <li>– Loads or unloads the ambulance improperly; fails to secure patient to the litter or carries the litter improperly at times resulting in further injury to patient.</li> <li>– Fails to perform ongoing assessment before and during patient transportation.</li> </ul>		<ul style="list-style-type: none"> <li>– Provides accurate details on the location of injured personnel; locates injured personnel using grids and maps and usually does so in a short amount of time; generally makes MEDEVAC requests appropriately and in a timely manner.</li> <li>– Usually loads and unloads the ambulance in the proper order; correctly handles and carries the litter; secures patients to the litter to avoid further injury.</li> <li>– Does not miss any critical areas when performing ongoing assessment before and during patient transportation.</li> </ul>			<ul style="list-style-type: none"> <li>– Always provides clear, accurate details on the location and condition of injured personnel; responds quickly to all radio requests for assistance; always makes MEDEVAC requests appropriately (correct transport decision – e.g., ground, air) and in a timely manner.</li> <li>– Always carefully loads and unloads the ambulance in the proper order; expertly handles and carries the litter; and expertly secures patients to the litter to avoid further injury.</li> <li>– Always performs a thorough ongoing assessment before and during patient transportation.</li> </ul>	
1	2	3	4	5	6	7

<p>F. Maintains Medical Supplies and Equipment</p> <p>Keeps existing medical supplies/equipment and medical aid bag well-stocked and properly stored; inspects medications for expiration and spoilage.</p>						
<ul style="list-style-type: none"> <li>– Often fails to check the availability of supplies/equipment; conducts inadequate inventories of existing medical aid bag or supplies/equipment; completes supply order forms incorrectly.</li> <li>– Improperly loads and stores supplies/equipment.</li> <li>– Fails to inspect medications for expiration and spoilage.</li> <li>– Conducts inadequate inventories of medical aid bag; does not monitor what is on hand and what is needed.</li> </ul>		<ul style="list-style-type: none"> <li>– In most cases, ensures that necessary supplies/equipment are available; may require supervision to conduct thorough inventories or to order replacements.</li> <li>– Usually loads and stores supplies/equipment properly.</li> <li>– Usually inspects medications for expiration dates and spoilage.</li> <li>– Conducts adequate inventories of medical aid bag when reminded to do so; generally monitors what is on hand.</li> </ul>			<ul style="list-style-type: none"> <li>– At all times ensures the availability of necessary supplies/equipment; closely monitors use and amount of existing supplies; orders replacements when needed without supervision.</li> <li>– Always loads and stores supplies/equipment properly.</li> <li>– Always inspects medications and eliminates expired or spoiled medication.</li> <li>– Carefully inventories and closely monitors use and amount of supplies in medical aid bag.</li> </ul>	
1	2	3	4	5	6	7

<p>G. Provides Health Care and Health Maintenance Instruction to Army Personnel</p> <p>Trains other Combat Life Savers (CLS) on proper injury or illness prevention techniques and trains Army personnel on health maintenance procedures.</p>						
<ul style="list-style-type: none"> <li>– Lacks knowledge or skill to instruct other Combat Life Savers (CLS) on basic procedures or new techniques.</li> <li>– Fails to provide health information to Army personnel to properly prepare for training maneuvers.</li> </ul>		<ul style="list-style-type: none"> <li>– Instructs other CLS on basic or new procedures and techniques and usually does so adequately.</li> <li>– Provides basic health care information to Army personnel to prepare for training maneuvers.</li> </ul>			<ul style="list-style-type: none"> <li>– Accurately instructs other CLS on routine and new health care procedures and provides guidance on how to improve their techniques.</li> <li>– Provides clear, detailed health care instructions to Army personnel to prepare for training maneuvers.</li> </ul>	
1	2	3	4	5	6	7

<b>H. Maintains and Operates Army Vehicles</b> Inspects and maintains Army vehicles to ensure that they are in mission-ready status, and operates vehicles in a safe and efficient manner.						
<ul style="list-style-type: none"> <li>– Performs improper Preventive Maintenance Checks and Services (PMCS); disregards or fails to note potential operating deficiencies on vehicles.</li> <li>– Speeds or drives recklessly, sometimes causing accidents; fails to use or heed a ground guide or gives improper instructions when acting as a ground guide; fails to obtain driver's license to operate vehicles.</li> </ul>		<ul style="list-style-type: none"> <li>– Performs routine PMCS according to SOP; routinely inspects vehicles for deficiencies and corrects minor problems.</li> <li>– Drives at a speed and in a manner that is appropriate for the road/terrain conditions; follows the directions of a ground guide; obtains and maintains driver's license to operate medical vehicle.</li> </ul>			<ul style="list-style-type: none"> <li>– Proactively performs PMCS to ensure vehicles are in excellent, field-ready condition; efficiently identifies and corrects all potential operating problems.</li> <li>– Operates vehicles safely and efficiently even under hazardous road conditions, avoiding all accidents; uses a ground guide when needed; obtains license to operate tactical and medical vehicles.</li> </ul>	
1	2	3	4	5	6	7

<b>I. Provides Advice on Clinical Field Site</b> Sets up, maintains, and inspects health care and other field facilities to ensure sanitary conditions; coordinates field sanitation team.						
<ul style="list-style-type: none"> <li>– During inspection, fails to identify facilities that are unsanitary; allows the water supply to run low or become contaminated.</li> <li>– Fails to identify a field sanitation team.</li> </ul>		<ul style="list-style-type: none"> <li>– When inspecting areas or facilities, identifies those that fail to meet required standards; ensures the water supply is adequate and uncontaminated.</li> <li>– Coordinates a field sanitation team and usually performs follow up inspections.</li> </ul>			<ul style="list-style-type: none"> <li>– Conducts regular, thorough inspections of field facilities; checks the water supply to ensure drinkability and availability.</li> <li>– Coordinates a field sanitation team and always conducts follow up inspections.</li> </ul>	
1	2	3	4	5	6	7

## 88M IN-UNIT PERFORMANCE RATING SCALES

<p><b>A. Driving Operations</b></p> <p>Performs transportation vehicle operations, including driving under different road conditions, coupling/uncoupling and operating trailers, and performing PMCS (preventive maintenance checks and services); completes DA Form 5988.</p>						
<ul style="list-style-type: none"> <li>– Ignores proper driving procedures (e.g., drives too fast, tailgates other vehicles); does not maintain vehicle control.</li> <li>– Does not follow proper procedures for coupling and operating vehicles with trailers/semi-trailers.</li> <li>– Does not perform proper PMCS on vehicle; does not understand or follow PMCS guides.</li> <li>– Cannot complete or read DA Form 5988.</li> </ul>		<ul style="list-style-type: none"> <li>– Shows acceptable progress in vehicle operation; maintains vehicle control; usually attentive to proper driving procedures.</li> <li>– Follows proper procedures in coupling and operating vehicles with trailers/semi-trailers.</li> <li>– Follows PMCS procedures; pays attention to vehicle condition during all stages of operation.</li> <li>– Demonstrates acceptable knowledge in completing and reading DA Form 5988.</li> </ul>		<ul style="list-style-type: none"> <li>– Is always attentive to proper driving procedures; very much at ease with vehicle operation; sets the example for vehicle operation that other drivers try to follow.</li> <li>– Couples trailers/semi-trailers and operates vehicle skillfully and without errors.</li> <li>– Performs PMCS completely and quickly; shows advanced understanding and is attentive to all stages of vehicle operation.</li> <li>– Demonstrates exceptional knowledge in properly completing and understanding DA Form 5988.</li> </ul>		
1	2	3	4	5	6	7



B. Transport Cargo and Personnel Places, secures, and protects cargo; loads and unloads personnel, including seating, protecting, transporting; works with hazardous cargo.						
– Places or secures loads improperly; does not understand loading principles and requirements.		– Knows cargo loading, bracing, and securing procedures.		– Knows all aspects of loading and securing cargo and shows extensive attention to detail.		
– Does not follow proper procedures for loading and securing hazardous cargo.		– Typically follows proper procedures for loading and securing hazardous cargo.		– Always follows proper procedures when loading and securing hazardous cargo.		
– Uses ratchet straps, chains, and binders improperly.		– Uses ratchet straps, chains, and binders properly.		– Applies ratchet straps, chains, and binders quickly and without errors.		
– Does not follow proper procedures for safely loading/unloading and transporting troops.		– Typically follows proper procedures for loading/unloading and transporting troops.		– Carefully follows proper procedures for loading/unloading and transporting troops.		
– Forgets hazardous cargo placards or uses them improperly.		– Typically uses correct hazardous cargo placards.		– Always correctly places hazardous cargo placards.		
– Does not understand or follow proper procedures after a spill of hazardous cargo.		– Follows most correct procedures after a spill of hazardous cargo.		– Carefully follows all proper procedures after a spill of hazardous cargo.		
1	2	3	4	5	6	7

C. Convoy Operations						
Operates vehicles in a convoy, following convoy control measures, convoy rules, and in-route instructions.						
<ul style="list-style-type: none"> <li>– Does not understand or follow convoy preparation procedures; does not perform correct actions at assembly areas, halts, and breaks.</li> <li>– Does not adequately control vehicle during convoy operations; often violates speed and interval requirements.</li> <li>– Does not follow strip maps; often misunderstands or does not follow route markers and directions.</li> <li>– Does not follow convoy leaders' instructions and signals.</li> </ul>		<ul style="list-style-type: none"> <li>– Generally follows the instructions for convoy preparation; completes actions at assembly areas, halts, and breaks, as directed.</li> <li>– Meets requirements of vehicle control and operation in convoy; follows catch-up speed instructions and corrects interval problems as directed.</li> <li>– Reads and follows strip maps; is alert and responsive to most route markers and directions.</li> <li>– Follows convoy leaders' instructions and signals.</li> </ul>			<ul style="list-style-type: none"> <li>– Fully prepares for convoy operations without need for additional instruction; completes all actions at assembly areas, halts, and breaks without direction.</li> <li>– Shows advanced skill in convoy operations; anticipates conditions affecting interval and speed, and adjusts driving accordingly.</li> <li>– Reads strip maps quickly, with no difficulty; shows complete knowledge and understanding of all route markers and directions.</li> <li>– Anticipates and always follows convoy leaders' instructions and signals.</li> </ul>	
1	2	3	4	5	6	7

D. Vehicle Operations in Tactical and Combat Situations and Under Difficult Conditions						
Operates vehicles in different terrains and conditions, including driving cross country and in inclement weather; driving at night; driving in combat conditions; performs battle drills.						
<ul style="list-style-type: none"> <li>– Does not perform battle and immediate action drills correctly; responds incorrectly and slowly to threat incidents.</li> <li>– Does not know or follow steps of preparing vehicle for combat operations; does not know or follow security procedures; lacks situational awareness.</li> <li>– Does not adjust vehicle operations to changes in road, weather, and light conditions; cannot operate effectively off road and at night.</li> </ul>		<ul style="list-style-type: none"> <li>– Typically performs battle and immediate action drills correctly; recognizes and responds as instructed to threat incidents.</li> <li>– Follows instructions for preparing vehicle for combat operation; follows tactical security instructions; is generally situationally aware.</li> <li>– Reacts to different road, weather, and light conditions; operates adequately off road and at night.</li> </ul>		<ul style="list-style-type: none"> <li>– Thoroughly knows and correctly performs battle and immediate action drills; reacts immediately and correctly to threat incidents.</li> <li>– Quickly and completely performs steps for preparing vehicle for combat operations; excels at completing proper security measures; shows a high level of situational awareness.</li> <li>– Accurately recognizes and effectively adjusts vehicle operation to road, weather, and light conditions; demonstrates above average ability operating off road and at night.</li> </ul>		
1	2	3	4	5	6	7

## APPENDIX L

### IN-UNIT ARMY LIFE QUESTIONNAIRE

#### Instructions

This assessment includes questions about your life as a Soldier. Please read each set of instructions and questions carefully. Be assured that your responses will remain completely confidential and will be used for research purposes only. When you are ready to begin, please click the **Continue** button below.

----- New Screen -----

#### Part I. Deployments

1. Are you currently, or have you been, on any of the following operational deployments during your current term of service? (check all that apply)

- ☐ US-Mexican Border (Operation Jump Start)
- ☐ Soto Cano, Honduras (Task Force Bravo)
- ☐ Guantanamo Bay, Cuba (Task Force GTMO)
- ☐ Kosovo or Rumania (Task Force East)
- ☐ Philippines (Task Force Philippines)
- ☐ Egypt (Sinai Multinational Force and Observers)
- ☐ Africa (Task Force Horn of Africa)
- ☐ Iraq or Kuwait (Operation Iraqi Freedom)
- ☐ Afghanistan (Operation Enduring Freedom)
- ☐ Saudi Arabia, Bahrain, Kuwait (Operation Desert Falcon)
- ☐ Other operational deployment (please specify) \_\_\_\_\_
- ☐ I have not been deployed

\*note: their answer to this question determines whether they answer the next section or not; if they check the last box, they will skip the next two screen and proceed straight to Part II

----- New Screen -----

Please indicate when and for how long you were deployed.

2. In what month were you first deployed?
3. How many total months have you been deployed?

----- New Screen -----

Please rate the extent to which you agree or disagree with the following statements about being deployed.

1	2	3	4	5
Strongly Disagree	<b>Disagree</b>	Neither Agree Nor Disagree	Agree	Strongly Agree

4. Being deployed has had a positive effect on my Army career.
5. I have been able to adjust to life as a deployed Soldier.
6. Since being deployed, I have second-guessed my decision to join the Army.
7. I have found my deployment to be an enriching experience.
8. Being deployed has increased the likelihood that I will re-enlist for another term.

Go to Part II

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## Part II. Army History

In this section, you will be asked about your history and accomplishments in the Army.

9. Have you received any of the following medals? (check all that apply)

- ☐ Army Achievement Medal
- ☐ Army Commendation Medal
- ☐ Army Good Conduct Medal
- ☐ Army Reserve Components Achievement Medal
- ☐ Army National Guard Components Achievement Medal
- ☐ Air Medal
- ☐ Distinguished Flying Cross Medal
- ☐ Joint Service Achievement Medal
- ☐ Joint Service Commendation Medal
- ☐ Army Soldier's Medal
- ☐ Military Outstanding Volunteer Service Medal
- ☐ Defense Meritorious Service Medal
- ☐ Purple Heart
- ☐ Bronze Star Medal
- ☐ Silver Star Medal
- ☐ Army Distinguished Service Cross
- ☐ Medal of Honor

10. During your time in the Army, have you received any of the following:

- |                                       |        |       |
|---------------------------------------|--------|-------|
| -an accelerated training advancement? | ___YES | ___NO |
| -an accelerated promotion?            | ___YES | ___NO |
| -an accelerated position?             | ___YES | ___NO |

----- New Screen-----

11. Have you ever ...

- |   |        |       |
|---|--------|-------|
| a. received an Article 15?                                    | ___YES | ___NO |
| 1. If yes, how many?  |        |       |
| b. been formally counseled about lack of effort?              | ___YES | ___NO |
| c. been formally counseled about your behavior or discipline? | ___YES | ___NO |
| d. been formally counseled about unsatisfactory performance?  | ___YES | ___NO |

12. Have you ever been placed on restriction for:

- |   |        |       |
|---|--------|-------|
| a. disobeying a direct order?             | ___YES | ___NO |
| b. not adhering to standards of conduct?  | ___YES | ___NO |
| c. disrespecting your peers or superiors? | ___YES | ___NO |

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13. What was your last Army Physical Fitness Test (APFT) score?

14. When was your last Army Physical Fitness Test (APFT) test? If you are unsure, please give you best estimate.
15. What was the last Weapon Qualification you received on your individual weapon?

----- New Screen-----

### Part III. The Army and You

In this section you will rate your level of agreement with several statements regarding your life as a Soldier. Please rate each statement that follows using the scale below.

1	2	3	4	5
Strongly Disagree	<b>Disagree</b>	Neither Agree Nor Disagree	Agree	Strongly Agree

16. I am able to maintain my values as a member of the Army.
17. I am confident that I will complete my current term of service.
18. I am proud to tell others I am in the Army.
19. I do not fit very well in the Army.
20. I doubt I could become as attached to another organization as I am to the Army.
21. I feel a strong sense of belonging to the Army.
22. I feel like I am part of the Army “family.”
23. I feel personally attached to the Army.
24. I feel that the problems faced by the Army are also my own problems.
25. I intend to leave the Army after completing my current term of service.
26. I like the amount of physical activity I have to do as a Soldier.
27. I plan to spend the rest of my career in the Army.
28. Life in the Army is worse than I expected before I joined the service.
29. My spouse/significant other would support my decision to re-enlist in the Army after my current term of service.
30. The Army has a great deal of personal meaning for me.
31. The Army is a good match for me.
32. The values of the Army reflect my own values.

----- New Screen-----

### Part IV. You and Your MOS

In this section, you will answer a series of questions about your MOS.

33. Since completing AIT/OSUT, what percentage of your daily activities has been related to performing or training in your primary MOS?
  1. 0%-25%
  2. 26%-50%
  3. 51%-75%
  4. 76%-100%

----- New Screen-----

1	2	3	4	5
Strongly Disagree	<b>Disagree</b>	Neither Agree Nor Disagree	Agree	Strongly Agree

- 34. My MOS allows me to perform the kind of work I want to do.
- 35. Given my skills and abilities, I think I am in the right MOS.
- 36. If I could easily switch my MOS, I would.
- 37. Working in my MOS helps me achieve my long-term career goals.
- 38. I think my skills make me better suited for another MOS.
- 39. My MOS is a good match for me.
- 40. Given my interests, I would be better off in another MOS.
- 41. I like the work I do in my MOS.
- 42. I am the right person for the type of work my MOS requires.

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1	2	3	4	5
Very Dissatisfied	<b>Dissatisfied</b>	Neither Satisfied Nor Dissatisfied	Satisfied	Very Satisfied

- 43. How satisfied are you with your opportunity to perform work you find interesting?
- 44. How satisfied are you with your opportunity to learn new skills on the job?
- 45. How satisfied are you with the amount of challenge in your work?
- 46. How satisfied are you with the amount of variety in your work?
- 47. How satisfied are you with your opportunity to use your aptitudes, experience, and training?
- 48. How satisfied are you with the day-to-day tasks on your job?

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## Part V. Your Army Career

In this section, you will be asked several questions about your Army career and your current term of service. It is very important that you answer each question honestly. Your responses will be kept confidential and used for research purposes only.

- 49. How frequently have you thought about trying to leave the Army before your current term of service expires?
  - 1. Never
  - 2. Rarely
  - 3. Sometimes
  - 4. Often
  - 5. Very Often

50. How important is it to you that you complete your current term of service?

1. Not Important
2. Somewhat Important
3. Important
4. Very Important
5. Extremely Important

51. How confident are you that you will stay in the Army until you retire?

1. Not at All Confident
2. Somewhat Confident
3. Confident
4. Very Confident
5. Extremely Confident

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Please use the following scale to answer the remaining questions.

1	2	3	4	5
Extremely Unlikely	<b>Unlikely</b>	Neither Likely nor Unlikely	Likely	Extremely Likely

52. How likely is it that you will complete your current term of service?

53. How likely is it that you will make the Army a career?

54. How likely is it that you will leave the Army after completing your current term of service?

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That completes this assessment. Thank you very much for your cooperation and input.